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Preface

The *Natural Gas Monthly (NGM)* is prepared in the Data Operations Branch of the Reserves and Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE).

General questions and comments regarding the *NGM* may be referred to Kendrick E. Brown, Jr. (202) 586-6077, Ann M. Ducca (202) 586-6137, or Eva M. Fleming (202) 586-6113. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association
Bbl	Barrels
BLS	Bureau of Labor Statistics, U.S. Department of Labor
Bcf	Billion Cubic Feet
BOM	Bureau of Mines, U.S. Department of the Interior
Btu	British Thermal Unit
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
EIA	Energy Information Administration, U.S. Department of Energy
FERC	Federal Energy Regulatory Commission
IOGCC	Interstate Oil and Gas Compact Commission
LNG	Liquefied Natural Gas
Mcf	Thousand Cubic Feet
MMBtu	Million British Thermal Units
MMcf	Million Cubic Feet
MMS	United States Minerals Management Service, U.S. Department of the Interior
NGL	Natural Gas Liquids
OCS	Outer Continental Shelf
STIFS	Short-Term Integrated Forecasting System
STEO	Short Term Energy Outlook
Tcf	Trillion Cubic Feet

Contents

Tables

Illustrations

Page

Natural Gas Pipeline and System Expansions

James Tobin

This special report examines recent expansions to the North American natural gas pipeline network and the nature and type of proposed pipeline projects announced or approved for construction during the next several years in the United States. It includes those projects in Canada and Mexico that tie in with U.S. markets or projects.

During 1996, 26 pipeline expansion projects were completed and placed in service in the United States. These projects either added capacity directly to the interstate network, improved local intrastate service, or expanded access to producing fields or natural gas market centers. Eight of the projects added capacity that increased interregional transmission capability by 687 million cubic feet (MMcf) per day: 487 MMcf per day in the United States and 200 MMcf per day into Canada (Table SR1). These eight projects plus four others increased daily interstate capability by 1,282 million cubic feet. This amount, however, was only 85 percent as much as the interstate capacity added in 1995. Moreover, while the total number of completed projects was slightly more than in 1995 (26 vs. 21), the total amount of pipeline capacity added, 2,548 MMcf per day, was well below the previous year's 3,450 MMcf per day, reflecting the smaller size of the 1996 projects.

Nevertheless, on an individual basis several significant projects were completed in 1996, including:

- **Completion of the lower section of the TransColorado pipeline system.** The southern 25-mile section of this proposed 266-mile pipeline system is now capable of moving 120 MMcf per day from the Ignacio area of the southern Colorado San Juan Basin to the Blanco hub in northern New Mexico (Figure SR1). When the northern section of the system is completed (proposed late 1998),[1] this recently completed section will expand its capability to more than 300 MMcf per day.

- **Completion of Transwestern Pipeline Company's San Juan Basin expansion.** The finish of this project has expanded capacity on the New Mexico side of the basin, thus relieving a bottleneck that has hindered the flow of production out of the area for several years. It has also improved producer access to customers located in the eastern and midwestern markets of the United States. During 1996, Transwestern also acquired the pipeline assets of Northwest Pipeline Company located between the Ignacio area of the San Juan Basin and the Blanco hub (which is operated by Transwestern). A consequence of this acquisition has been a greater integration of gathering and processing capabilities in the area and the elimination of some flow bottlenecks and production constraints.

- **Completion of the MidCon/TransTexas Pipeline from the North Bob West production field in south Texas to interconnections with the interstate system and market centers in the Katy area of east Texas.** The completion of this intrastate pipeline project (275 MMcf per day) links the largest new production area ever developed in south Texas and provides local producers access to the interstate marketplace for the disposition of their production. Production from, and linkages with, the Bob West field also figure predominately in the proposed development of several export pipelines to Mexico over the next several years.

- **Inauguration of the new offshore Shell Gas Pipeline and expansion of the Stingray system in the Gulf of Mexico.** This represents an additional 675 MMcf per day of access to the growing natural gas development in the deep waters of the Gulf. Although neither line is currently flowing at rated capabilities, these systems are expected to be fully supported within a year. Completion of these two projects represents the prelude to a massive proposed expansion of pipeline and gathering system development in the Gulf during the next several years. Fully 16 such projects are on the drawing board or are pending before the Federal Energy Regulatory Commission (FERC) or other jurisdictional agencies for approval (see next section).

[1]The TransColorado Pipeline was originally slated for completion in mid-1992, but changing market conditions and other factors delayed construction until recently. The northern section will run from the Big Hole area of Rio Blanco County in northwest Colorado to the Ignacio area in southern La Plata County, Colorado.

Table SR1. Regional Summary of Interstate Pipeline Capacity and Planned Additions, 1995–2000

Region	Entering the Region[a] (MMcf/d)						Within the Region[b] (MMcf/d)					
	Capacity End of 1995	Added 1996	Capacity End of 1996	Percent Change from 1995	Proposed Additions to Capacity 1997-2000[c]	Percent Change from 1996	Capacity End of 1995	Added 1996	Capacity End of 1996	Percent Change from 1995	Proposed Additions to Capacity 1997-2000	Percent Change from 1996
Western	10,080	0	10,080	0	0	0	26,129	0	26,129	0	13	[d]
Southwest	2,520	375	2,895	15	180	6	57,512	899	58,411	2	3,836	7
Central	12,676	20	12,696	[d]	1,437	11	37,077	42	37,119	[d]	4,819	13
Midwest	24,682	55	24,736	[d]	4,065	16	48,769	90	48,859	[d]	11,558	24
Northeast	12,202	25	12,228	[d]	1,862	15	45,881	75	45,956	[d]	5,269	11
Southeast	21,586	12	21,598	1	87	[d]	72,550	176	72,726	[d]	1,682	2
U.S. Total	**83,746**	**487**	**84,233**	**1**	**7,631**	**9**	**287,918**	**1,282**	**289,200**	[d]	**27,177**	**9**
Canada	2,409	200	2,609	8	0	0	NA	NA	NA	NA	NA	--
Mexico	889	0	889	0	1,200	47	NA	NA	NA	NA	NA	--

[a]Includes only the sum of capacity levels for the States and Canadian Provinces bounding the respective region.

[b]Represents the sum of the interstate pipeline capacity, or planned capacity, on a State-to-State basis as measured at individual State border crossing points. Does not include projects which are entirely within one State. Gulf of Mexico projects are considered within the Southwest or Southeast region.

[c]New capacity has been counted in only one region even though some projects may cross regional boundaries. In the case of a new line, the additional capacity has been included within the region in which it terminates. For an expansion project, the added capacity is included in the region where most of the expansion effort is focused.

[d]Less than one-half of 1 percent.

MMcf/d = Million cubic feet per day. NA = Not available.

Sources: **Capacity:** Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database, as of April 1, 1997. **Capacity Additions:** EIAGIS-NG Geographic Information System, Natural Gas Pipeline Construction Database, as of April 1,1997, compiled from Federal Energy Regulatory Commission, Natural Gas Act Section 7(c) Filings, "Application for Certificate of Public Convenience and Necessity," and various natural gas industry news sources.

- **Export capacity to Canada increased with the completion of two projects in the Midwest Region:** ANR Pipeline Company's "LINK" project (150 MMcf per day) and Great Lakes Gas Transmission Company's St. Clair Import Point Looping (50 MMcf per day). The LINK project supplies gas to a local Canadian distribution company, Niagara Gas Transmission Ltd. of Ontario, while the St. Clair project provides increased supply security and backup at the existing export point. Both projects improve the free flow of North American gas supplies and access to markets. A slight increase in capacity into the United States from Canada (20 MMcf per day) occurred with the completion of Viking Gas Transmission Company's Northern Looping project from Manitoba, Canada to Minnesota.

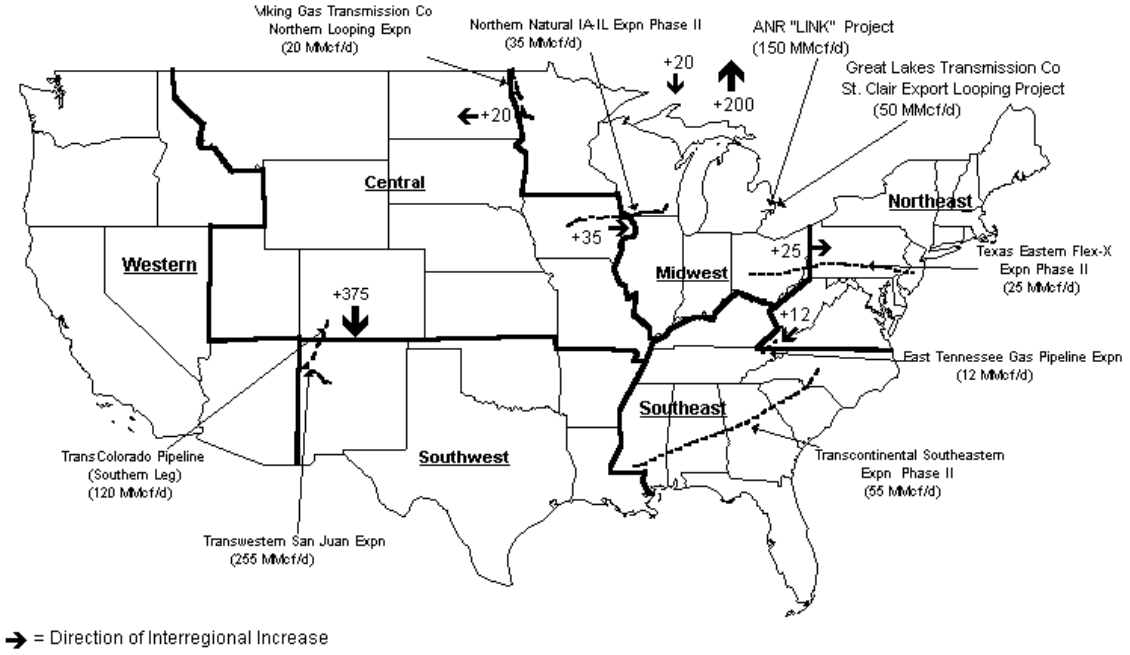
- **Several multiyear projects were finally completed in 1996.** Northern Natural Gas Company's Iowa-Illinois expansion (107 MMcf per day) was finished in the latter part of the year, adding 35 MMcf per day in its final phase. Transcontinental Gas Pipeline Company completed the final phase of its Southeastern project covering a mainline capacity increase of 55 MMcf per day along its system between Alabama and North Carolina. Texas Eastern Transmission Corporation's Flex-X and ITP projects were finalized with the completion of two local projects in Pennsylvania and added capacity on its line between Ohio and New Jersey.

The remainder of the projects completed in 1996 consisted of minor local projects that represented line or system upgrades of a specialized nature. In Kansas, for example, Western Resources Inc. constructed a 9-mile (55 MMcf per day) line between its Mid-Continent market center and local pipeline interconnections to improve the marketability of its services in the area.

Proposed Expansions

While the past several years have been a comparatively slow period for pipeline expansions, between now and the turn of the century a great deal of new pipeline capability is proposed for development throughout North America. Much of the proposed new pipeline construction can be grouped into several major focus areas. The most extensive development is focused on expanding the deliverability of Canadian gas to the U.S. Midwest and Northeast and to Canadian markets. Four

Figure SR1. Completed Interstate Pipeline Expansion Projects, 1996



Expn = Expansion.

Source: Energy Information Administration (EIA), EIAGIS-NG Geographic Information System, Natural Gas Pipeline State Border Capacity Database and Natural Gas Pipeline Construction Database, as of April 1, 1997.

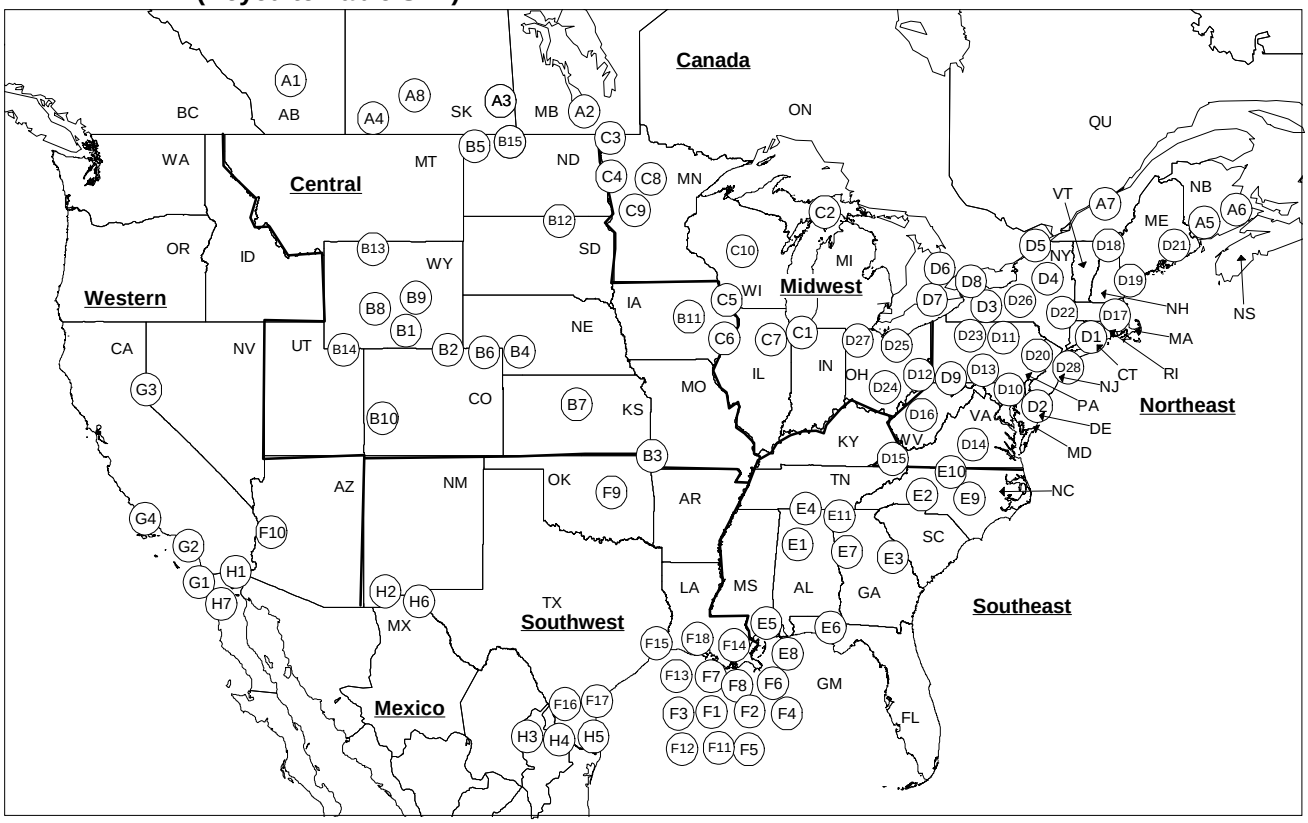
new pipelines and several expansions are planned, which not only would improve access to natural gas supplies in western Canada but also to production from the developing Sable Island field in eastern Canada. The second-largest focus is on improving access to the increasing deep-water production in the Gulf of Mexico. Next are those projects whose objectives are to increase the flow of lower-cost supplies located in the Central United States to markets located primarily in the Midwest. Currently, the capability to do so is limited. The latter series of expansions will be competing, to some degree, with the projects slated to increase flows of western Canadian gas to the Midwest marketplace.

Although there is a question as to whether or not the market can support all these expansions, it must be kept in mind that these projects can proceed only if sufficient commitments are entered into by future customers.[2] Most of the proposed projects have undergone market testing through "open-season" offerings whereby potential customers have placed bids for future capacity on the proposed projects. The planned capacity of the proposed projects usually reflects the results of these open seasons and indicates that, at least at the moment, local distribution companies and other major customers believe demand will grow sufficiently to support the incremental supplies destined for these markets.

As of April 1, 1997, the Energy Information Administration was tracking approximately 88 proposed pipeline expansions and new pipeline projects at various stages of development in the United States, Canada, and Mexico (Figure SR2). Fourteen of these projects are slated to be phased in over several years or are jurisdictionally segmented (for instance, U.S. versus Canadian segments). If all U.S. projects were completed, the amount of new capacity would add more than 20 billion cubic feet of daily deliverability on the national network (six gathering system projects in the Gulf of Mexico, one project entirely in Mexico, and seven Canadian projects, some of which are counted in the U.S. projects, are not

[2]Without firm customer commitments, neither the necessary regulatory approval nor any needed external financing will be forthcoming. Nevertheless, it is possible that some customers might back out of these commitments, which could leave the final implementation of a project in doubt.

Figure SR2. General Location of Major Proposed Pipeline Construction Projects, 1997–2000 (Keyed to Table SR2)



Source: Energy Information Administration (EIA), EIA GIS-NG Geographic Information System, Natural Gas Pipeline Construction Database, as of April 1, 1997.

included).[3] Of all phases/projects (117 in total), 53 are tentatively scheduled for completion in 1997, 35 in 1998, 24 in 1999, and 5 in the year 2000.[4] Forty-four of the projects call for development of new pipeline systems or facilities at new international border points.

Only 113 MMcf per day of additional pipeline capacity is proposed for the Western Region. This is not surprising since the region currently has an excess of interstate capacity. Between 1990 and 1995, interstate capacity within and into the region increased by 58 percent, from 16,545 to 26,129 MMcf per day, more than for any other region. The Southeast has the next lowest amount of planned pipeline expansions, 2,695 MMcf per day, and only 13 proposed projects. Proposed capacity additions in the Southeast are geared, for the most part, toward improving specific services to customers in North and South Carolina, although four major projects are designed to increase regional access to deep water production in the Gulf of Mexico by as much as 1,650 MMcf per day by 1999.

Canadian Connections

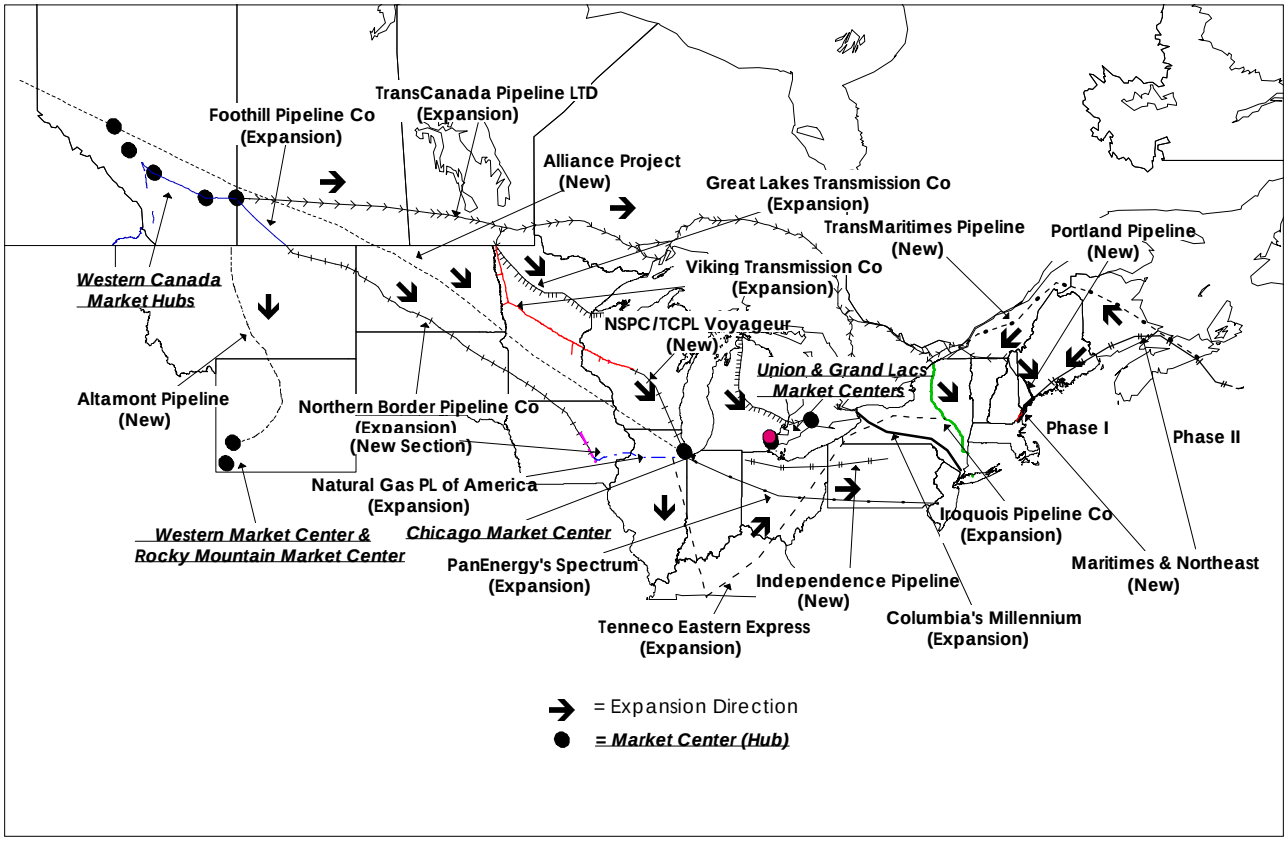
Sixteen projects have been proposed that would add more than 8,063 MMcf per day to U.S. import capacity from Canada over the next 4 years,[5] an increase of 78

[3]For instance, 118 million cubic feet of the TransCanada Pipeline 1997-98 (non-Nexus) Expansion Project's 286 million cubic feet of daily deliverability represents planned increases to export capability.

[4]These numbers include four projects that are currently "on hold" and thus unlikely to be placed in service within the scheduled year.

[5]Does not include the potential import capacity that will be a part of the TransCanada Ltd. Nexus project.

Figure SR3. Planned Projects Related to Imports of Canadian Gas, 1997–2000



Source: Energy Information Administration (EIA), EIA GIS-NG Geographic Information System, Natural Gas Pipeline Construction Database, as of April 1, 1997.

percent from 1996 levels. The volume increase is almost double the total Canadian import capacity added from 1991 through 1996, 4,080 MMcf per day.[6] This anticipated growth reflects the continuing U.S. demand for Canadian natural gas, especially in the Midwest and Northeast regions, and the desire on the part of western Canadian producers to expand further into these markets.

Within Canada, several projects are planned that will improve operational flows significantly, add to export capability, and enhance the business operations of some of the regional market centers. For instance, several western Canadian market centers are currently limited by available capacity on the TransCanada Pipeline system. Production capabilities in western Canada, especially in Alberta, exceed the amount of pipeline capacity now existing on the system in that area. As a result, Canadian shippers are unable to reach their full potential market to the east. The Intra-Alberta, Empress, and AECO-C hubs in particular are well-positioned geographically but are restricted in their ability to expand operations.

To help alleviate the situation, several expansions and one new pipeline project have been proposed (Figure SR3). In the latter case, a new natural gas pipeline (the Alliance project) would bring gas from British Columbia to the Chicago, Illinois area along the right-of-way of an existing oil pipeline.[7] Competing with this project are several others, including a potential partnership between TransCanada Pipeline Ltd. and Northern States Power Company (TCPL/NSPC) to develop a 1,200-MMcf-per-

[6]For information on capacity added through 1994, see Energy Information Administration, *Energy Policy Act Transportation Study: Interim Report on Natural Gas Flows and Rates,* DOE/EIA-0602 (Washington, DC, October 1995), p. 22. An additional 383 MMcf per day of import capability was added during 1995 and 1996.

[7]The application for another new system, the Palliser Pipeline, designed to expand and improve the capability of producers to transport their gas out of Alberta on other than the NOVA Gas System, is currently on hold (suspended) before the National Energy Board of Canada and may be canceled. It was to be constructed within the province of Alberta and linked to the TransCanada pipeline system.

day line between the Noyes, Minnesota import point and the Chicago, Illinois area. Moreover, Viking Gas Transmission Company has proposed an expansion to its import capability. Although much smaller in proposed added capacity (62 MMcf per day), the Viking route runs almost parallel to the proposed TransCanada / Northern States Power route.

Reflecting the growing demand for western Canadian supplies in eastern Canada and the United States, TransCanada Pipeline Ltd. applied to the Canadian National Energy Board in 1996 for permission to expand its facilities from Saskatchewan to Quebec (286 MMcf per day in 1996, with additional expansions in 1997 and 1998). Subsequently, in late 1996, TransCanada proposed to extend its expansion plans even further by adding a substantial 1,400 MMcf per day to its proposed system capabilities (Nexus project). The new capacity would be phased in over 2 years beginning in 1998. These expansion plans are targeted to meet the need of Alberta producers and other shippers and also support growth at Alberta hubs and several other market centers located along the proposed expansion corridors (Figure SR3). The Iroquois center (NY), and perhaps the Grand Lac (MI) and Union Gas (ON) centers, could benefit from TransCanada's expansion. The Chicago center could benefit if one or more of the proposed projects (Alliance, TCPL / NSPC, Viking) are completed and the appropriate interconnection(s) developed.

In August 1996, the Federal Energy Regulatory Commission approved construction of the Northern Border Pipeline Company expansion project, which would add 700 MMcf per day to import capacity at the Montana border. Correspondingly, Foothill Pipe Line Ltd. of Canada, which interconnects with Northern Border Pipeline at Monchy, Montana, would expand its eastern leg by the same amount. In February 1997, Foothills Pipeline Ltd. proposed to expand its system further and conducted an open season to gauge shipper demand.

On the Canadian east coast, several new pipelines have been proposed to move gas supplies being developed off the Canadian Atlantic coast near Sable Island to markets in Canada and the United States (Figure SR3). The TransMaritimes pipeline would move Sable Island supplies to the Quebec marketplace as well as eastern Ontario and the Northeastern United States via the Portland Gas Transmission System.[8] The Maritimes & Northeast pipeline project is also slated to transport gas from the Sable Island Offshore project, but its route will take it directly into the State of Maine and through New Hampshire to interconnections with the Tennessee Gas Pipeline system in Massachusetts. Both proposals are designed to serve some of the same markets, so some of the current marketing plans may have to be revised. The proponents of the two systems currently contend that anticipated market demand in the region will accommodate both pipelines.

Market Areas

Midwest

During the next several years, service to the Midwest Region will grow with 6,200 MMcf per day of new interstate capacity planned, the second highest of the six regions. But what really distinguishes the growth in the Midwest is that the vast majority of new capacity would be on newly built trunklines or extensions to existing pipelines bringing supplies from Canada. The Midwest will be the terminus for the Alliance project, which alone would increase area service by 1,325 MMcf per day.[9] Coupled with the extension of the Northern Border Pipeline to Manhattan, Illinois (near Chicago) and Natural Gas Pipeline Company of America's (NGPL) Amarillo expansion (345 MMcf per day) destined for the same area,[10] the Midwest Region's access to Canadian supplies would increase by more than 220 percent (4,769 MMcf per day) from 1990 levels (2,161 MMcf per day).[11]

Within the region, in 1997 Great Lakes Gas Transmission Company plans to complete the system expansion that it began in the early 1990's. Further expansion has been proposed to tie in with the TransCanada system expansions and increase support to shippers wanting to transport gas to Ontario, Canada via an alternative to the northern TransCanada route. Besides adding to overall system capacity, the multiyear project emphasizes enhancement of system reliability and backup. The multiyear project is slated to add 126 MMcf per day of new system capacity (Table SR2).

[8]TransCanada Pipeline Ltd. is a partner in both the Portland Gas Transmission System and the TransMaritimes projects, as well as in the existing TransQuebec & Maritime Pipeline system which will link with and carry supplies for both.

[9]The border crossing to be built for the Alliance pipeline will be capable of moving up to 1,600 MMcf per day of gas if necessary.

[10]In March 1997, NGPL submitted an alternative (CP97-294) to its original Amarillo expansion proposal that would preclude the need for Northern Border to execute its own expansion between Harper, Iowa and Chicago. However, Northern Border has not withdrawn its original proposals.

[11]Energy Information Administration, *Energy Policy Act Transportation Study: Interim Report on Natural Gas Flows and Rates*, DOE / EIA-0602 (Washington, DC, October 1995), Table 5, p. 32.

In conjunction with the planned expansion of the TransCanada Pipeline system, Great Lakes Transmission has proposed a 2,000 MMcf per day expansion on 1,000 miles of its system extending from Noyes, Minnesota to St. Clair, Michigan. This project not only would increase supplies to customers in the Midwest but also would provide an integral link in support of Columbia Gas Transmission Company's Millennium project, which has been proposed to begin gas deliveries in the fall of 1999 to customers in the Northeast (see next section). Great Lakes Transmission, which is a partner with Columbia and TransCanada in the Millennium project, will tranship supplies through Canada via TransCanada from the St. Clair export point to the Millennium pipeline at Niagara, New York.

Northeast

The large number of proposed projects slated to bring Canadian supplies into the Midwest has raised concern about excess capacity developing in the area. This possibility has spurred several companies to plan large-scale projects that would extend some of this new capacity further eastward to Northeast markets. For example, ANR Pipeline Company and Transcontinental Gas Pipeline Company have proposed the jointly owned Independence project, which could carry 900 MMcf per day from ANR's line in northwestern Ohio to a major interconnection with Transcontinental's line in Leidy, Pennsylvania, a major hub serving the northeastern marketplace. The new line would also be attractive to Canadian shippers seeking an alternative route to Northeast markets. It could also provide an alternative route and opportunity for shippers now moving gas from the Southwest to the Midwest to reach customers located in the Northeast.

Other projects that would move some of the new Midwestern pipeline supplies eastward include Tennessee Gas Pipeline Company's proposed Eastern Express project and PanEnergy Corporation's Spectrum project. These two projects alone represent a total of 1,100 MMcf per day of new capacity into the Northeast. Including the Independence and Millennium projects, as well as other import projects slated for development during the next several years, new capacity into the region could exceed 3,000 MMcf per day, adding significantly to the 12,202 MMcf per day existing in 1996 (Table SR1).

The Spectrum project (500 MMcf per day) would extend from the Chicago, Illinois area to New York and New England, mostly using expanded facilities along PanEnergy's affiliated pipelines: Panhandle Eastern, Texas Eastern, and Algonquin Gas Transmission systems (west to east). In addition, an interconnection with another affiliate, Trunkline Gas Company, could be utilized to move gas supplies from the Southwest Region if appropriate (as could the Panhandle Eastern Pipeline system). The Eastern Express project (650 MMcf per day) would utilize Midwestern Gas Transmission Company (an affiliate of Tennessee Gas Pipeline Company) to ship supplies southward (or though displacement) to Tennessee Gas's interconnection in northern Tennessee and then, through expanded facilities on its existing system, transport supplies from the Midwest to the east coast. In addition, the Eastern Express project would include expansion of Tennessee Gas's pipeline between its Niagara, New York import point and its interconnections near Leidy, Pennsylvania and its northern line extending directly to New England.

The announced TransCanada Pipeline Ltd. Nexus expansion project, slated for development in 1998 and 1999, could result in expansions at several import points into the Northeastern United States and development of at least one new import point (for Columbia Gas Transmission's Millennium project). For instance, in anticipation of TransCanada's multiyear expansion plans, Iroquois Pipeline Company recently held an open season on its system, using an expansion figure of 200 MMcf per day as an initial reference. Combined with the Millennium import level of 650 MMcf per day and several import expansions related to other projects, TransCanada's export capacity to the U.S. Northeast could increase by 1,139 MMcf per day by the end of 1999, a 53-percent increase over 1996 levels. Adding in the anticipated 618 MMcf per day import capability of the Maritimes & Northeast and Portland pipelines, total Canadian import capacity into the Northeast Region could approach 4,000 MMcf per day by the end of the century.

Planned expansions in the Northeast Region are also somewhat unique in that a number represent cooperative efforts between regional pipeline systems. For example, the Texas Eastern expansion of service to some of its Virginia and eastern Pennsylvania service areas depends partly upon the completion of the CNG Transmission PL-1 line and Seasonal Service expansion projects, including improvements to storage deliverability. Columbia Gas Transmission, with its "Market Expansion" project, is also planning improvements (especially to storage services) on its system that would increase deliverability to several major interconnections with these same pipelines. National Fuel Gas Supply Company, another major regional system, has proposed upgrades to its system based upon the eventual completion of projects by Columbia, CNG, and Texas Eastern. In particular,

National Fuel's project will complement CNG's planned improvement to its system for flowing gas between Leidy, Pennsylvania, a major storage area and hub interconnection point, and Steuben County, New York and then northward, where CNG and National Fuel have major interconnections.

Of the 30 singular projects planned within the region representing 6,268 MMcf per day of new capacity, 17 are either directly or indirectly linked by mutual service needs or partnerships.[12] These projects constitute about 18 percent, or 1,115 MMcf per day, of the new capacity additions in the region.

U.S. Production Areas

Gulf of Mexico: Deep Water Access

One of the more significant events of the past several years has been the increased attention to development of gas resources in deeper waters (greater than 200 meters) in the Gulf of Mexico, off Louisiana and Mississippi. At least 16 projects,[13] representing more than 6,457 MMcf per day of capacity, have been proposed for development during 1997 and 1998 that would reach into the deep water area of the Gulf to tap several new production sources being developed there—most notably in the Ship Shoal, Green Canyon, Destin Corridor, Garden Banks, and Mississippi Canyon areas. Companies such as Marathon Oil, Shell Oil, and Texaco are represented (Figure SR2). Two such projects, the Shell Offshore Pipeline (600 MMcf per day) and the Centena Main Pass/Viosca Knoll Gathering system (300 MMcf per day), were completed in 1996.

Other Southwest

Development of offshore and deep water pipeline-related projects represent 82 percent of the 5,882 MMcf per day of planned additions in the Southwest Region. The remaining onshore expansion projects are designed primarily to increase access to supplies in the Anadarko Basin located in central Oklahoma, and in the San Juan Basin of New Mexico. Several small projects in south Texas are designed to support exports to Mexico, if and when the export crossings are finally put in place.

San Juan Basin Access

Until recently the pipeline capacity available to move gas from the San Juan Basin area eastward was limited. The rapid development of the area's coalbed methane and other supplies in the area during the late 1980's led to an excess in productive capacity. Originally the new production was expected to be consumed in the California market, and pipeline capacity was developed with that in mind. Today, however, the emphasis is on finding ways to move some of this supply eastward to link with market centers in the Waha area of Texas, from which the gas could be redirected through northern and eastern Texas to Midwest and Northeast markets. The two major interstate pipeline companies in the area, Transwestern Pipeline Company and El Paso Natural Gas Company, have undertaken efforts to expand and enhance facilities located on their respective systems, which would allow them to direct more production eastward to the Waha/Permian Basin centers. Transwestern Pipeline Company completed its efforts in 1996.

El Paso Natural Gas Company's response to the problem has been the proposed Havasu Crossover expansion. This project would use currently available capacity on the westward-bound portion of the system to move supplies that would eventually be redirected eastward (either physically or by displacement) just east of the California border. The expansion would entail upgrades of the Havasu Crossover, which currently links the north and south parts of the El Paso system but with limited capacity. The expansion would allow El Paso to deliver an additional 180 MMcf per day in the Waha area of west Texas when completed. (Some preliminary work at the crossover was completed in 1996.)

In particular, these expansions will increase flows to the Blanco market center, which is strategically located at the terminus of the Transwestern and El Paso pipeline systems exiting the San Juan Basin in northern New Mexico. This center has been operating at full capacity and could grow significantly as additional capacity becomes available and the option to move greater volumes eastward increases. The most significant impact can be expected at the Waha area and Buffalo Wallow centers as they compete with each other to direct the additional flows to the eastern Texas area and beyond.

[12] Transcontinental Gas Pipeline Company and Tennessee Gas Pipeline Company also have several projects in the region that will benefit from and support the expansions in the region.

[13] Four projects would direct supply to the Southeast (Alabama and Mississippi) and six to the Southwest (Louisiana). The other projects would be gathering systems.

Anadarko Basin Access

The Oklahoma Anadarko Basin is another production area that has the potential for development of greater access to regional market centers, although currently only one major project, the Transok Pipeline Company's system-wide expansion project, is slated for the area. Nevertheless, this project would provide area producers 255 MMcf per day of additional access to market centers located in northern and eastern Texas and northern and southern Louisiana. The other regional pipelines, Ozark Gas Transmission Company and Texoma Pipeline System, also could be used as alternative routes for transhipping Anadarko production to higher priced markets via current and future market center interconnections.

Central

Proposed capacity additions are also significant in the Central Region, the other major gas-producing area in the United States. Two factors in particular contribute to this: (1) the approved expansion of the Northern Border Pipeline and possible completion of the long-delayed Altamont system connecting with supplies from Canada, and (2) the expansion of capacity out of the Rocky Mountain area toward the East (see below). In all, additions amounting to 5,053 MMcf per day of new capacity are planned.

The "Alliance Project" (Table SR2 under Midwest), planned for completion by 1999, could also potentially add to available deliverability in the Central Region. Its route from British Columbia to Illinois will take it through the Central Region, but no interconnections within the region have been announced.

Rocky Mountain Supplies

In the past, Wyoming and Utah supplies generally moved to a strong southern California gas market, but that market has developed an excess of pipeline capacity during the past several years and is currently considered a soft market for natural gas. With the emphasis on the western market, eastward pipeline capacity has been quite limited.

On the other hand, customers in the Midwest and East are very interested in having greater access to these relatively lower priced supplies.[14] The situation has generated planning on the part of several pipeline companies in the area to expand eastward capacity. For instance, KN Interstate has announced plans for the "Pony Express" line (255 MMcf per day), and Trailblazer / Overthrust / Wyoming Interstate system (100 to 200 MMcf per day) has filed expansion plans with the Federal Energy Regulatory Commission. The latter expansion would dovetail with Natural Gas Pipeline Company of America's plans to expand capacity on its Amarillo line moving supplies to the Midwest Region. The several market centers at either end of this expansion could be expected to benefit, although some centers located in the Waha and Texas Panhandle may experience greater competition for their Midwestern business.

Mexico Connections

Several projects have been proposed to add capacity to the export capability of U.S. natural gas companies located near the border with Mexico. None of the projects represent enhancements to import capabilities, currently at 350 MMcf per day, a figure that has not changed since the 1980's. All of the proposed projects are to support mostly industrial and power generation customers located in the border area.

If completed, the currently proposed projects would represent about 1,200 MMcf per day of additional export capacity. However, none of the projects proposed since 1991 (when export capacity to Mexico stood at 889 MMcf per day) have actually been implemented. Several of the projects are competing within and for the same market. For example, the MidCon-Texas Pipeline Company (Figure SR2) and Coastal States Gas Transmission Company are both seeking to negotiate with Mexican buyers for firm shipping agreements to essentially the same general area. Nevertheless, both companies view their projects as proceeding regardless of the outcome of negotiations. These two companies also have plans to construct pipelines within Mexico that will link with their border crossing project and Texas intrastate pipeline construction projects. If completed, these pipelines will be the first ones constructed in Mexico by U.S. companies in recent times.

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[14] Producers in the Rocky Mountain area have had to endure low prices for their gas for the past several years because of this limited access. They hope that expanded access to these markets will bring them the prices currently experienced at the East Texas and Louisiana interconnections.

Most of the proposed projects have been proceeding slowly for environmental, economic, and regulatory reasons. One obstacle has been overcome with the installation of Mexico's newly formed regulatory authority, the Comision de Energia (CRE). The CRE has issued less restrictive regulations on foreign investment in Mexico affecting the ownership and operation of pipeline facilities owned by others. In the fall of 1996, the CRE announced its first award of a (privatization) license permitting the development of a local gas distribution system in the Baha area of northern Mexico.[15] This action may hasten the approval and final implementation of several similar local service development proposals, which are linked to pending U.S. export proposals that have remained dormant for several years.

Summary

The slowdown of pipeline expansion in the past 3 years appears to be over. The amount of new capacity proposed for development by the end of 2000 is significant, and if fully implemented would represent a 9-percent increase over 1996 levels. Although it is unlikely that all proposed expansions will be completed, more proposals are surfacing each week. In February 1996, for instance, at least six pipeline companies instituted open-season exercises with the expectation that the market will support additional expansion plans.[16] These proposals included expansions in all regions of the country.

Beyond what has already been proposed, there are areas of the country where additional pipeline expansion plans might develop in response to changing market profiles and the development of new supply sources. For instance, Gulf of Mexico deep-water development will continue over the next decade and with it could come additional complementary onshore expansions. In addition, Oklahoma's Anadarko Basin is another production area that has the potential for developing greater access to regional market centers, although currently only one major project, the Transok Pipeline Company's system-wide expansion project, is slated for the area.

The upcoming major increase in capacity from Canada to the U.S. Midwest may also spur additional development of new pipelines, or expansions of existing lines, that can provide alternative capacity for transhipment of some of this gas to the U.S. Northeastern marketplace. Already the proposed ANR/Transco Independence project is premised on the assumption that excess capacity into the Chicago, Illinois area could develop over the next several years, because so many projects are proposed to bring in Canadian supplies.

[15]The award was made to a consortium consisting of Pacific Enterprises International (PEI), Enova International Corporation and Proxima. The license will permit the group to transport gas from PEI's local system in lower California into the city of Mexicali in northern Mexico.

[16]They were: Iroquois Gas Pipeline Company, Natural Gas Pipeline Company of America, Transcontinental Gas Pipeline Company, Questar Pipeline Company, and Colorado Interstate Pipeline Company.

Table SR2. Major Proposed Natural Gas Pipeline Construction Projects, by Terminating Region and Planned In-Service Year, 1997–2000

Year	Ends in State	Begins in State	Begins in Region	Map Key	Pipeline/Project Name	FERC Docket Number	Status As of 4-1-97[a]	New or Expansion	Miles	Cost Estimate (million $)	Added Capacity (MMcf/d)
Canada											
1998	AB	AB	Canada	A1	Palliser Pipeline	--	On Hold	New	590	219	1,200
1998	QU	SK	Canada	A2	TransCanada System Expn	--	Approved	Expn	128	900	286
1998	QU	SK	Canada	A3	TransCanada Nexus Phase I	--	Announced	Expn	NA	1,900	475
1998	SK	SK	Canada	A4	Foothills Pipeline Eastern Expn	--	Approved	New	70	18	700
1999	NB	NS	Canada	A5	Maritimes & Northeast Phase II	--	Pending	New	386	434	465
1999	QU	NS	Canada	A6	TransMaritimes (Sable Island) II	--	Pending	New	416	740	530
1999	QU	NS	Canada	A7	TransMaritimes Pipeline I	--	Pending	New	192	(b)	(b)
1999	SK	BC	Canada	A8	Alliance Pipeline (Canada Portion)	--	Approved	New	982	700	1,325
1999	QU	SK	Canada	A3	TransCanada Nexus Phase II	--	Announced	Expn	NA	NA	925
										Total New Capacity[c]	**5,906**
Central											
1997	CO	WY	Central	B1	Wyoming Interstate Eastward	CP96-288	Approved	Expn	NA	40	192
1997	KS	WY	Central	B2	Williams Gas WY-KS Expn	NA	Pending	Expn	NA	NA	30
1997	MO	KS	Central	B3	Williams Gas KS-MO Expn	NA	Pending	Expn	13	NA	15
1997	MO	WY	Central	B4	KN Interstate Pony Express	CP96-477	Pending	New	850	154	255
1997	ND	SK	Canada	B5	ISP "Solution gas" Imports	CP96-684	Approved	New	1	1	3
1997	NE	CO	Central	B6	Trailblazer Eastward Expn	CP96-506	Approved	Expn	445	NA	105
1997	NE	OK	Southwest	B7	NGPL Amarillo Upgrade	CP94-577	Approved	Expn	14	33	-25
1997	WY	WY	Central	B8	CIG Wind River Lateral Expn	CP96-289	Approved	Expn	NA	11	42
1997	WY	WY	Central	B9	KN Interstate Casper Loop	CP95-113	On Hold	Expn	52	15	47
1998	CO	CO	Central	B10	TransColorado Pipeline (Northern)	CP90-1777	Approved	New	266	184	300
1998	IA	IA	Central	B11	Northern Border Harper Expn	CP95-194	Approved	Expn	142	NA	962
1998	IA	SK	Canada	B12	Northern Border Monchy Expn	CP95-194	Approved	Expn	243	797	700
1998	WY	SK	Canada	B13	Altamont Pipeline	CP90-1372	Approved	New	620	139	737
1998	UT	WY	Central	B14	Questar Mainline (Line 58) Expn	CP96-820	Approved	Expn	41	18	90
1999	ND	SK	Canada	B15	Alliance Pipeline (Import Station)	CP97-169	Approved	New	1	NA	1,600
										Total New Capacity[c]	**5,053**
Midwest											
1997	MI	IL	Midwest	C1	ANR Michigan Leg Expn	CP96-641	Approved	Expn	120	19	135
1997	MI	MI	Midwest	C2	Great Lakes Security Looping II	CP96-297	Approved	Expn	25	44	0
1997	MN	SK	Canada	C3	TransCanada Import Expn	--	Approved	Expn	NA	NA	56
1997	WI	MB	Canada	C4	Viking System-Wide Expn	CP97-93	Pending	Expn	150	28	62
1997	WI	KS	Central	C5	Northern Natural Peak Day 2000 I	CP97-25	Pending	Expn	39	102	244
1998	WI	KS	Central	C5	Northern Natural Peak Day 2000 II	CP97-25	Pending	Expn	5	NA	23
1998	IL	IA	Central	C6	NGPL Amarillo Expn	CP96-27	Approved	Expn	85	85	345
1998	IL	IA	Central	C7	Northern Border Manhattan Extn	CP95-194	Approved	New	200	NA	684
1998	MI	MB	Canada	C8	Great Lakes System Wide Expn	CP95-647	Pending	Expn	72	149	126
1999	MI	MB	Canada	C8	Great Lakes System Expn II	--	Announced	Expn	1,000	2,500	2,000
1999	IL	SK	Canada	C9	Alliance Project (US Portion)	CP97-168	Pending	New	886	600	1,325
2000	IL	MB	Canada	C10	NSPC/TCPL Voyageur Project	NA	Announced	New	750	850	1,200
										Total New Capacity[c]	**6,200**
Northeast											
1997	CT	CT	Northeast	D1	Algonquin Electric Load Lateral	CP96-201	Approved	Expn	8	15	82
1997	MD	DE	Northeast	D2	Eastern Shore Bridgeville Expn	CP96-97	Approved	Expn	29	7	4
1997	NY	NY	Northeast	D3	CNG Woodhull/Avoca Line	CP96-493	On Hold	New	NA	NA	100
1997	NY	NY	Northeast	D4	Iroquois Import Expn	CP96-687	Pending	Expn	200	22	35
1997	NY	QU	Canada	D5	TransCanada Import (Iroquois)	--	Pending	Expn	NA	NA	24
1997	NY	QU	Canada	D6	TransCanada Import (Chippawa)	--	Pending	Expn	NA	NA	48
1997	NY	QU	Canada	D7	TransCanada Import (Niagara)	--	Pending	Expn	NA	NA	39
1997	PA	NY	Northeast	D8	National Fuel Niagara Expn	CP96-545	Pending	Expn	139	11	48
1997	PA	PA	Northeast	D9	Texas Eastern Winternet I	CP96-606	Pending	Expn	NA	NA	20
1997	PA	PA	Northeast	D10	Texas Eastern Columbia Expn	CP96-559	Pending	Expn	81	67	142
1997	PA	PA	Northeast	D10	Texas Eastern Line 1-A Expn	CP97-276	Pending	Expn	23	13	128
1997	PA	PA	Northeast	D11	Transco Pocono Project	NA	Announced	Expn	NA	NA	35
1997	PA	WV	Northeast	D12	CNG Seasonal Service Expn	CP96-492	Pending	Expn	NA	NA	100
1997	VA	PA	Northeast	D13	CNG PL-1 Phase I	CP96-492	Pending	Expn	NA	NA	15
1997	VA	VA	Northeast	D14	Commonwealth PL Expn	NA	Approved	Expn	NA	NA	18
1997	VA	TN	Southeast	D15	East Tennessee System Wide	CP96-696	Pending	Expn	NA	13	33
1997	VA	PA	Northeast	D16	Columbia Gas Market Expn I	CP96-213	Pending	Expn	379	22	232

Table SR2. Major Proposed Natural Gas Pipeline Construction Projects, by Terminating Region and Planned In-Service Year, 1997–2000 (Continued)

Year	Ends in State	Begins in State	Begins in Region	Map Key	Pipeline/Project Name	FERC Docket Number	Status As of 4-1-97[a]	New or Expansion	Miles	Cost Estimate (million $)	Added Capacity (MMcf/d)
Northeast (Continued)											
1998	PA	NY	Northeast	D8	National Fuel Niagara/Leidy I	--	Announced	Expn	139	NA	100
1998	PA	PA	Northeast	D9	Texas Eastern Winternet II	CP96-606	Pending	Expn	NA	NA	20
1998	VA	PA	Northeast	D13	CNG PL-1 Phase II	CP96-492	Pending	Expn	NA	NA	25
1998	VA	VA	Northeast	D14	Virginia Natural Saltville Line	--	Pending	Expn	NA	NA	25
1998	VA	PA	Northeast	D16	Columbia Gas Market Expn II	CP96-213	Pending	Expn	379	20	167
1998	MA	MA	Northeast	D17	Tenneco/DOMAC	CP96-164	Pending	New	8	26	55
1998	ME	QU	Canada	D18	Portland Pipeline	CP95-248	Approved	New	190	303	178
1998	ME	MA	Northeast	D19	Portland/Maritimes & Northeast I	CP97-238	Approved	New	100	175	631
1998	NY	PA	Northeast	D20	Transco Seaboard Expn	CP96-545	Pending	Expn	36	106	115
1999	PA	NY	Northeast	D8	National Fuel Niagara/Leidy II	--	Announced	Expn	139	NA	650
1999	PA	PA	Northeast	D9	Texas Eastern Winternet III	CP96-606	Pending	Expn	NA	NA	12
1999	VA	PA	Northeast	D13	CNG PL-1 Phase III	CP96-492	Pending	Expn	NA	NA	25
1999	VA	PA	Northeast	D16	Columbia Gas Market Expn III	CP96-213	Pending	Expn	379	20	108
1999	ME	NB	Canada	D21	Maritimes & Northeast II (US Portion)	CP96-809	Pending	New	386	425	440
1999	NY	QU	Canada	D22	Iroquois NY City Expn	--	Announced	Expn	NA	NA	200
1999	PA	NY	Northeast	D23	Tenneco Niagara-Leidy Expn	--	Announced	Expn	NA	NA	200
1999	NY	PA	Northeast	D23	Transco MarketLink Expn	--	Announced	Expn	2	NA	400
1999	PA	TN	Southeast	D24	Tenneco Eastern Express	--	Announced	Expn	NA	NA	200
1999	PA	OH	Midwest	D25	ANR/Transco Independence PL	--	Announced	New	370	600	900
1999	NY	ON	Canada	D26	Columbia's Millennium PL	--	Announced	New	380	600	650
2000	NY	IL	Midwest	D27	PanEnergy's Spectrum PL	--	Announced	New	NA	NA	500
2000	NY	NJ	Northeast	D28	Texas Eastern Excelsior Project	--	Announced	New	44	NA	500
2000	PA	PA	Northeast	D9	Texas Eastern Winternet IV	CP96-606	Pending	Expn	NA	NA	12
										Total New Capacity[c]	**7,418**
Southeast											
1997	AL	AL	Southeast	E1	SONAT Zone 3 AL	CP96-153	Approved	Expn	119	53	76
1997	NC	NC	Southeast	E2	Transco Maiden Lateral Expn	CP97-193	Pending	Expn	18	13	38
1997	SC	GA	Southeast	E3	SONAT Zone 3 GA-SC-TN	CP96-541	Pending	Expn	27	36	45
1997	AL	TN	Southeast	E4	U.S. Gypsum Lateral	CP97-202	Approved	New	15	4	21
1997	AL	GM	Offshore	E5	DIGS (Dauphin Island) Expn	CP97-300	Pending	Expn	13	54	100
1998	MS	GM	Offshore	E5	Transco Mobile Bay Expn	NA	Approved	Expn	198	NA	350
1998	FL	AL	Southeast	E6	Florida Gas Phase IV	--	On Hold	Expn	NA	32	37
1998	GA	AL	Southeast	E7	Transco Cherokee Project	--	Announced	Expn	NA	70	87
1999	MS	GM	Offshore	E8	Chandeleur Main Pass Expn	--	Announced	Expn	30	NA	200
1999	MS	GM	Offshore	E8	Destin Corridor Offshore	CP96-655	Approved	New	220	294	1,000
1999	NC	NC	Southeast	E9	Cardinal Pipeline	--	Announced	Expn	67	98	140
1999	NC	NC	Southeast	E10	Transco Pine Needle LNG Link	CP96-134	Approved	New	1	1	400
2000	TN	GA	Southeast	E11	Cumberland Pipeline	--	Pending	Expn	NA	NA	200
										Total New Capacity[c]	**2,695**
Southwest											
1997	GM	GM	Offshore	F1	Garden Banks Offshore System	CP96-113	Approved	New	50	NA	600
1997	GM	GM	Offshore	F2	Manta Ray Gathering System	CP96-796	Approved	New	47	60	300
1997	GM	GM	Offshore	F3	Transco Sealeg Project I	CP96-758	Approved	Expn	51	80	380
1997	GM	GM	Offshore	F4	DIGS Main Pass Gathering	CP97-300	Pending	New	63	54	200
1997	LA	GM	Offshore	F5	Green Canyon System	CP96-557	Pending	New	133	200	515
1997	LA	GM	Offshore	F6	Koch South Pass Area Expn	CP96-572	Approved	New	16	NA	300
1997	LA	GM	Offshore	F7	Nautilus System	CP96-790	Approved	New	87	121	600
1997	LA	GM	Offshore	F8	Discovery Pipeline	CP96-712	Approved	New	147	189	600
1997	OK	OK	Southwest	F9	Transok West-to-East System Expn	--	Announced	Expn	130	75	255
1997	TX	AZ	Western	F10	El Paso Havasu Crossover	CP96-321	Pending	Expn	98	20	180
1998	GM	GM	Offshore	F11	Transco Sealeg Project II	CP96-758	Approved	Expn	27	49	279
1998	GM	GM	Offshore	F12	Williams Natural Gas Genesis Expn	--	Pending	New	35	NA	72
1998	LA	GM	Offshore	F13	ANR Conch Project	CP97-71	Approved	Expn	37	51	461
1998	LA	GM	Offshore	F14	Trunkline Terrebone Expn	CP97-105	Pending	Expn	145	52	500
1998	LA	TX	Southwest	F15	ANR Katy Project	--	Announced	New	220	NA	200
1998	TX	TX	Southwest	F16	Coastal States Roma Export Line	--	Announced	New	18	NA	170
1998	TX	TX	Southwest	F17	MidCon Texas Pipeline	CP96-140	Approved	New	15	1	270
										Total New Capacity[c]	**5,882**

Table SR2. Major Proposed Natural Gas Pipeline Construction Projects, by Terminating Region and Planned In-Service Year, 1997–2000 (Continued)

Year	Ends in State	Begins in State	Begins in Region	Map Key	Pipeline/Project Name	FERC Docket Number	Status As of 4-1-97[a]	New or Expansion	Miles	Cost Estimate (million $)	Added Capacity (MMcf/d)
Western											
1997	CA	CA	Western	G1	San Diego G&E Pipeline 2000	CP93-117	Approved	New	80	85	40
1997	CA	CA	Western	G2	Tenneco Baja SoCal Interconnect	CP96-140	Pending	New	16	NA	40
1997	CA	NV	Western	G3	Paiute Pipeline North Taho Lateral	CP94-29	Approved	Expn	23	11	13
1998	CA	CA	Western	G4	Pacific Offshore Santa Barbara Expn	--	Approved	Expn	NA	NA	20
										Total New Capacity[c]	**113**
Mexico											
1997	MX	CA	Western	H1	Tenneco Baja Mexacali Export	CP96-140	Approved	New	1	NA	40
1997	MX	NM	Southwest	H2	Public Service Co of NM Export	CP93-98	Approved	New	NA	NA	12
1997	MX	MX	Mexico	H3	MidCon Texas Mexico Project	--	Approved	New	92	40	270
1997	MX	TX	Southwest	H4	MidCon Texas Roma Export Point	CP96-583	Pending	Expn	1	NA	270
1998	MX	TX	Southwest	H5	Coastal States Roma Export Point	CP96-770	Pending	New	1	NA	170
1998	MX	TX	Southwest	H6	El Paso Samalayucca II	CP93-252	Approved	Expn	21	15	208
1999	MX	CA	Western	H7	SoCal Project Vecinos	CP94-207	Approved	New	8	100	500
										Total New Capacity[c]	**1,470**

[a]Announced = Prior to filing with regulatory authorities. Pending = Before regulatory authority for review and acceptance. Approved = Fully or conditionally approved by regulating authority; may or may not be under construction. On Hold = May be canceled or postponed due to changed market or regulatory conditions.

[b]Cost and added capacity are the same for this and previous line item.

[c]Excludes "On Hold" projects.

MMcf/d = Million cubic feet per day. Expn = Expansion. NA = Not available. -- = Not applicable. Extn = Extension.

CIG = Colorado Interstate Gas Co.; CNG = CNG Transmission Co; DIGS = Dauphin Island Gathering System; NGPL = Natural Gas Pipeline Co. of America; NSPC = Northern States Power Co.; SoCal = Southern California Gas Co.; SONAT = Southern Natural Gas Co.; Tenneco = Tennessee Gas Pipeline Co.; TCPL = TransCanada Pipeline Ltd.; Transco = Transcontinental Gas Pipeline Co.;

Note: Underlined items indicate project crosses regional boundary.

Source: Energy Information Administration, EIAGIS-NG Geographic Information System, Natural Gas Proposed Pipeline Construction Database, as of April 1, 1997, compiled from Federal Energy Regulatory Commission filings and various industry news sources.

Natural Gas 1996: Highlights

Production

Total natural gas production in 1996 rose to 19.0 trillion cubic feet, the highest level since 1981 and almost 3 trillion cubic feet higher than the 16.1 trillion cubic feet seen 10 years earlier. Production was stimulated at least in part by higher natural gas wellhead prices, which averaged $2.25 per thousand cubic feet. The 1996 average wellhead price was 45 percent greater than the $1.55 recorded in 1995 and was the highest level since 1986 (after adjustment for inflation). Increased gas consumption, even in the face of higher prices, motivated the rise in gas production despite a slight climb in gas imports and small, but positive, net withdrawals from storage.

A number of supply sources contributed to the greater gas production in 1996. Production from the entire Gulf of Mexico increased 3.7 percent over 1995 volumes. Production from the deep water region in the Gulf of Mexico expanded as new fields, such as the Mars project, initiated production. Some fields, such as Shell's Auger project and others that started during 1995, were able to produce for an entire year, adding to the growing offshore production total.

The trend for increasing gas production from the offshore Gulf of Mexico is expected to continue during the next few years in light of the list of projects under development or in planning. The Mensa project in 5,400 feet of water is expected to begin production in 1997. This project is quite significant because it will have the deep water record for production when it comes on line. These technical accomplishments are impressive in themselves, and associated with each milestone is the expansion of future production opportunities as another technical barrier is overcome. The extension of recovery opportunities into deep water has established the deep offshore as an area of considerable national significance.

A second source of increased supply is gas from coalbed formations. Natural gas production from coalbed methane fields continued to grow in 1996 as projects initiated mainly in the early to mid 1990s matured through the dewatering phase into higher rates of gas production. Coalbed formations contribute almost 1 trillion cubic feet, roughly 5 percent, to total U.S. production. Continued production growth from coalbeds is not likely in light of the precipitous drop in new wells completed in coalbed formations since the termination of the production tax credit at the end of 1992. New well completions in coalbed formations averaged 244 in 1995 and 1996, compared with 1,325 from 1990 through 1992.

The strong industry performance in 1996 is expected to continue at least for the near term. Gas proved reserves increased in both 1994 and 1995, which is the first consecutive increase in gas reserves in 28 years. Proved reserves are significant as an indicator of future gas production potential. The growth in reserves shows a response to the greater number of gas exploratory wells, which have more than doubled since 1992. Further, gas exploratory wells have grown as a fraction of all gas completions, rising from 5 percent in 1993 to more than 10 percent in 1995 and 1996. Overall, the number of producing gas wells increased by 3.2 percent over the 1995 total, continuing a 29-year trend.

Imports

Natural gas imports continued to climb for the 10th consecutive year, reaching a record 2.9 trillion cubic feet in 1996. However, the growth rate slowed, as imports rose only 1 percent above their 1995 level, in comparison with the 12-percent average annual growth rate during the previous 7 years. The average price of imports showed a sharp increase from $1.49 per thousand cubic feet in 1995 to $1.97 per thousand cubic feet in 1996. Canada's share of the natural gas import market into the United States continued in excess of 99 percent. Imports from Mexico and liquefied natural gas (LNG) shipments from Algeria and the United Arab Emirates (two shipments from Abu Dhabi late in the year) made up the rest.

Exports

Total natural gas exports decreased by nearly 12 percent in 1996. Exports to Canada rose 85 percent to 51 billion cubic feet, while exports to Mexico dropped 45 percent to 34 billion cubic feet. Liquefied natural gas exports to Japan were 68 billion cubic feet, a gain of 4 percent. The average price of all exports increased by 25 percent, from $2.39 per thousand cubic feet in 1995 to $2.98 in 1996.

Underground Storage

The ability of the natural gas industry to remove gas from storage in times of high demand is a critical factor in supplying customer needs. Historically, the industry built up an inventory of storage between April and October (the refill season) and drew upon that inventory from November through March (the heating season). That general pattern of net injections during the refill season and net withdrawals during the heating season continues to apply. The concept of "sufficient inventory at the beginning of the heating season" has changed however in that the industry is generally maintaining lower storage inventories. The lower levels reflect changes in the natural gas industry, changes in the way underground storage is managed by the industry, the impact of technological changes in storage facilities, and the development of a more integrated transportation network.

Storage operations have been changing in recent years, particularly in the utilization of high-deliverability storage. Instead of primarily providing backup supply, high-deliverability storage is now used to provide peaking supply or short-term swing supply. In addition, the natural gas transportation network has increased the number of interconnections among pipelines thereby increasing the ability to deliver gas. Together, these changes in storage operations and transportation interconnections have succeeded in meeting high demand in the winter months without the high inventory levels of past years.

The 1994-95 heating season, which was warmer than normal, started with 3,075 billion cubic feet of working gas in underground storage and ended in March 1995 at 1,332 billion cubic feet, a net drawdown of 1,743 billion cubic feet. The following year, the heating season began with 2,996 billion cubic feet in storage, 2.5 percent lower than the previous year. Although the weather was more severe than normal, the net drawdown of 1,241 billion cubic feet was 29 percent lower than during the previous warmer-than-normal winter. The 1995-96 heating season ended with 755 billion cubic feet of working gas in storage, 43 percent less than the ending inventory of the previous heating season. During both winters, the natural gas industry met the needs of its core customers. At the end of October 1996, the industry began the 1996-97 heating season with yet a lower starting inventory of only 2,800 billion cubic feet of working gas in underground storage. The 1996-97 heating season was warmer than normal. Working gas levels at the end of March 1997 are estimated to be 999 billion cubic feet, 20 percent higher than year-earlier levels.

Consumption

Continuing the upward trend that began in 1991, total natural gas consumption rose again during 1996. Consumption is estimated to be 21.9 trillion cubic feet, 2 percent higher than in 1995 and among the highest annual levels ever recorded.[1] Natural gas has accounted for 25 percent of total energy consumption in the United States since 1992, and this share was maintained in 1996.

Higher consumption in 1996 was driven by weather-related demand in the residential and commercial sectors as consumption in the electric utility sector declined 15 percent compared with 1995. Weather differences between the 2 years were strong during the first 4 months, especially in March. According to heating degree day data, the nation was, on average, 14 percent colder-than-normal during March 1996, which was 27 percent colder than in March 1995. In fact, many parts of the country were from 30 to 60 percent colder in March 1996 than in March 1995.

[1]The highest level of total natural gas consumption was 22.1 trillion cubic feet in 1972. Records go back to 1930.

The cumulative effect of the colder weather was that natural gas consumption for January through April in 1996 exceeded that of 1995 by 14 percent in the residential sector and 12 percent in the commercial sector. Total gas consumption in 1996 is estimated to be 5.2 trillion cubic feet in the residential sector and 3.2 trillion cubic feet in the commercial sector. These levels are 8 and 6 percent higher, respectively, than in 1995.

Industrial consumption of natural gas, which includes consumption by cogenerators, is estimated to be 8.8 trillion cubic feet in 1996, 2 percent higher than in 1995. In both years, consumption by the industrial sector was 44 percent of total deliveries to natural gas consumers.

In the face of rising prices and increased demand from the residential and commercial sectors, natural gas consumption by electric utilities declined 15 percent in 1996, falling to 2.7 trillion cubic feet. Consumption was down 25 percent during the first four months alone compared with 1995. Net generation of electricity by utilities increased 83 billion kilowatt hours (3 percent) from 1995 to 1996,[2] whereas gas-fired generation declined 44 billion kilowatt hours. Hydroelectric generation increased 35 billion kilowatt hours during the period. Even greater increases occurred from coal-fired generation, which was 83 billion kilowatt hours higher in 1996 than in 1995.

End-Use Prices

The strong rebound in average wellhead prices in 1996 had less of an impact on residential and commercial gas users than on industrial and electric utility customers.[3] The average price of natural gas is estimated to be $6.30 and $5.37 per thousand cubic feet in 1996 in the residential and commercial sectors, respectively. These increases are only 4 and 6 percent, respectively, compared with the 45-percent increase in the average wellhead price from 1995 to 1996. Wellhead price increases that occurred late in 1996 may not affect residential and commercial customers until early 1997, because often they are billed in a manner that attempts to smooth out costs over time.
In contrast, industrial and electric utility customers saw increases of 23 and 33 percent, respectively, in the average price paid for natural gas in 1996. Prices in these sectors are typically more sensitive to swings in wellhead prices. The industrial price in 1996 is estimated to be $3.34 per thousand cubic feet, while the price paid by electric utilities is estimated to be $2.68 per thousand cubic feet. Average monthly prices in 1996 were often more than 30 percent higher than they had been in 1995 in both sectors.

City Gate Prices

Prices paid at the city gate by local distribution companies for the gas they sell to their customers rose substantially between 1995 and 1996. Prices climbed from $2.78 per thousand cubic feet to $3.34, an increase of 20 percent. Following the pattern of change in wellhead price, the increase was greater in the last half of the year. It was particularly marked during the last quarter; the December 1996 price of $4.19 per thousand cubic feet was $1.36 greater than the corresponding price a year earlier. City gate prices represent the total acquisition cost at the point where the gas is physically transferred from a pipeline to the distribution company.

[2]Derived from Energy Information Administration, Monthly Energy Review, DOE/EIA-0035(97/03) (Washington, DC, March 1997), Table 7.1.
[3]End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1996 they were from 58 to 82 percent of commercial deliveries and only 15 to 22 percent of industrial deliveries.

Table SR1. Summary Statistics for Natural Gas in the United States, 1992-1996

	1992	1993	1994	1995	1996
Production (million cubic feet)					
Gross Withdrawals					
From Gas Wells	16,164,874	16,691,139	17,351,060	17,282,032	17,656,001
From Oil Wells	5,967,376	6,034,504	6,229,645	6,461,596	6,628,486
Total	22,132,249	22,725,642	23,580,706	23,743,628	24,284,487
Repressuring	-2,972,552	-3,103,014	-3,230,667	-3,565,023	-3,708,339
Nonhydrocarbon Gases Removed	-280,370	-413,971	-412,178	-388,392	-358,667
Wet After Lease Separation	18,879,327	19,208,657	19,937,861	19,790,213	20,217,481
Vented and Flared	-167,519	-226,743	-228,336	-283,739	-262,941
Marketed Production	18,711,808	18,981,915	19,709,525	19,506,474	19,954,540
Extraction Loss	-871,905	-886,455	-888,500	-907,795	-929,881
Total Dry Production	17,839,903	18,095,460	18,821,025	18,598,679	19,024,659
Supply (million cubic feet)					
Dry Production	17,839,903	18,095,460	18,821,025	18,598,679	19,024,659
Receipts at U.S. Borders					
Imports	2,137,504	2,350,115	2,623,839	2,841,048	2,867,608
Intransit Receipts	486,163	324,093	487,760	492,481	NA
Withdrawals from Storage					
Underground Storage	2,723,774	2,717,064	2,508,151	2,974,102	2,883,212
LNG Storage	48,534	82,189	70,689	50,446	NA
Supplemental Gas Supplies	117,919	118,999	110,826	110,290	129,664
Balancing Item	-507,565	-109,593	-415,579	-230,002	29,633
Total Supply	22,846,233	23,578,326	24,206,711	24,837,044	25,212,000
Disposition (million cubic feet)					
Consumption	19,544,364	20,279,095	20,707,717	21,580,665	21,910,525
Deliveries at U.S. Borders					
Exports	216,282	140,183	161,739	154,119	152,350
Intransit Deliveries	486,161	324,093	472,499	492,481	NA
Additions to Storage					
Underground Storage	2,555,393	2,759,738	2,796,279	2,565,882	2,871,901
LNG Storage	44,033	75,217	68,478	43,897	NA
Total Disposition	22,846,233	23,578,326	24,206,711	24,837,044	25,212,000
Consumption (million cubic feet)					
Lease and Plant Fuel	1,170,821	1,171,940	1,123,720	1,220,168	1,249,154
Pipeline Fuel	587,710	624,308	685,362	700,335	711,039
Delivered to Consumers					
Residential	4,690,065	4,956,445	4,847,702	4,850,318	5,225,131
Commercial	2,802,751	2,861,569	2,895,013	3,031,077	3,208,521
Industrial	7,526,898	7,981,433	8,167,033	8,579,585	8,784,183
Vehicle Fuel	511	960	1,741	2,674	NA
Electric Utilities	2,765,608	2,682,440	2,987,146	3,196,507	2,732,496
Total Delivered to Consumers	17,785,833	18,482,847	18,898,635	19,660,161	19,950,332
Total Consumption	19,544,364	20,279,095	20,707,717	21,580,665	21,910,525
Average Prices for Natural Gas (dollars per thousand cubic feet)					
Wellhead (Marketed Production)	1.74	2.04	1.85	1.55	2.25
Imports	1.85	2.03	1.87	1.49	1.97
Exports	2.25	2.59	2.50	2.39	2.98
City Gate	3.01	3.21	3.07	2.78	3.34
Delivered to Consumers					
Residential	5.89	6.16	6.41	6.06	6.30
Commercial	4.88	5.22	5.44	5.05	5.37
Industrial	2.84	3.07	3.05	2.71	3.34
Electric Utilities	2.36	2.61	2.28	2.02	2.68

NA = Not available.

Notes: Beginning in 1987, prices for gas delivered to consumers are calculated using only on-system sales data. No imputations are made for prices of gas delivered for the account of others. In previous years, prices were calculated using reported values and values imputed for gas delivered for the account of others. The United States includes the 50 States and the District of Columbia. Totals may not equal sum of components due to independent rounding.

Sources: 1991-1994: Energy Information Administration (EIA), Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition”; Form EIA-627, “Annual Quantity and Value of Natural Gas Report”; Form EIA-857, “Monthly Report of Natural Gas Purchases and Deliveries to Consumers”; Form EIA-816, “Monthly Natural Gas Liquids Report”; Form EIA-759, “Monthly Power Plant Report”; Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Plants”; Form EIA-191, “Underground Gas Storage Report”; Form FPC-14, “Annual Report for Importers and Exporters of Natural Gas”; and the U.S. Minerals Management Service. 1995: All sources listed for 1991-1994 except: Form EIA-895, “Monthly Quantity of Natural Gas Report,” replaces Form EIA-627; and Office of Fossil Energy, U. S. Department of Energy, “Natural Gas Imports and Exports Quarterly Report,” replaces Form FPC-14.

Table SR2. Gross Withdrawals and Marketed Production of Natural Gas by State, 1996

(Million Cubic Feet)

Year and State	Gross Withdrawals			Repressuring	Nonhydro-carbon Gases Removed	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	419,732	11,326	431,058	23,336	27,035	1,811	378,877
Alaska	183,749	3,190,000	3,373,749	2,884,109	0	7,078	482,563
Arizona	508	99	607	0	0	1	606
Arkansas	160,485	33,601	194,086	7,652	0	311	186,124
California	85,984	311,168	397,153	111,019	1,087	529	284,518
Colorado	448,650	88,348	536,998	10,653	0	1,118	525,227
Florida	0	6,706	6,706	0	700	0	6,006
Illinois	289	9	298	0	0	0	298
Indiana	137	0	137	0	0	0	137
Kansas	630,464	85,972	716,436	1,218	0	716	714,501
Kentucky	83,177	0	83,177	0	0	0	83,177
Louisiana	4,779,421	711,234	5,490,655	40,932	0	21,279	5,428,444
Maryland	13	0	13	0	0	0	13
Michigan	206,239	51,560	257,798	2,293	0	3,161	252,344
Mississippi	117,412	6,210	123,622	9,366	8,316	2,677	103,263
Missouri	38	0	38	0	0	0	38
Montana	45,165	6,530	51,695	76	0	500	51,119
Nebraska	1,824	815	2,640	0	0	0	2,640
Nevada	0	11	11	0	0	0	11
New Mexico	1,420,358	240,758	1,661,116	9,595	3,322	1,707	1,646,492
New York	17,494	641	18,134	0	0	3	18,131
North Dakota	16,672	38,546	55,218	2,731	132	3,877	48,479
Ohio	122,162	0	122,162	0	0	0	122,162
Oklahoma	1,526,386	288,984	1,815,370	0	0	0	1,815,370
Oregon	1,793	16	1,809	35	397	0	1,377
Pennsylvania	129,295	478	129,772	0	0	0	129,772
South Dakota	885	6,727	7,612	6	0	6,339	1,267
Tennessee	0	2,010	2,010	0	0	0	2,010
Texas	5,711,906	1,382,981	7,094,887	459,373	163,147	29,866	6,442,501
Utah	233,594	47,614	281,208	3,165	0	27,277	250,767
Virginia	71,477	0	71,477	0	0	0	71,477
West Virginia	178,984	0	178,984	0	0	0	178,984
Wyoming	1,061,708	116,142	1,177,850	142,780	154,532	154,692	725,845
Total	17,656,001	6,628,486	24,284,487	3,708,339	358,667	262,941	19,954,540

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-895, “Monthly Quantity of Natural Gas Report.”

Table SR3. Summary of U.S. Natural Gas Imports and Exports, 1992-1996

	1992	1993	1994	1995	1996
Imports					
Volume (million cubic feet)					
Pipeline					
Canada	2,094,387	2,266,751	2,566,049	2,816,408	2,813,415
Mexico	0	1,678	7,013	6,722	13,919
Total Pipeline Imports	2,094,387	2,268,429	2,573,061	2,823,130	2,827,334
LNG					
Algeria	43,116	81,685	50,778	17,918	35,325
United Arab Emirates	0	0	0	0	4,949
Total LNG Imports	43,116	81,685	50,778	17,918	40,274
Total Imports	2,137,504	2,350,115	2,623,839	2,841,048	2,867,608
Average Price (dollars per thousand cubic feet)					
Pipeline					
Canada	1.84	2.02	1.86	1.48	1.95
Mexico	—	1.94	1.99	1.53	2.24
Total Pipeline Imports	1.84	2.02	1.86	1.48	1.96
LNG					
Algeria	2.54	2.20	2.28	2.30	2.73
United Arab Emirates	—	—	—	—	3.45
Total LNG Imports	2.54	2.20	2.28	2.30	2.82
Total Imports	1.85	2.03	1.87	1.49	1.97
Exports					
Volume (million cubic feet)					
Pipeline					
Canada	67,777	44,518	52,556	27,554	50,865
Mexico	95,973	39,676	46,500	61,283	33,843
Total Pipeline Exports	163,750	84,195	99,057	88,836	84,708
LNG					
Japan	52,532	55,989	62,682	65,283	67,642
Total Exports	216,282	140,183	161,738	154,119	152,350
Average Price (dollars per thousand cubic feet)					
Pipeline					
Canada	1.83	2.14	2.42	1.96	2.67
Mexico	1.90	2.02	1.68	1.50	2.11
Total Pipeline Exports	1.88	2.08	2.08	1.64	2.45
LNG					
Japan	3.43	3.34	3.18	3.41	3.64
Total Exports	2.25	2.59	2.50	2.39	2.98

— = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1995: Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Imports and Exports Quarterly Report."

Table SR4. Additions to and Withdrawals from Gas Storage by State, 1996

(Million Cubic Feet)

State	Underground Storage			Total		
	Injections	Withdrawals	Net	Number of Active Fields	Capacity (billion cubic feet)	Percent of U.S. Capacity
Alabama	3,349	2,125	-1,224	1	4	0.04
Arkansas	7,152	7,216	64	3	32	0.39
California	105,428	154,536	49,108	10	515	6.31
Colorado	37,718	37,304	-414	9	100	1.22
Illinois	243,202	227,457	-15,745	30	904	11.08
Indiana	27,436	25,791	-1,644	28	113	1.39
Iowa	61,518	61,225	-293	4	270	3.31
Kansas	104,998	123,230	18,232	18	283	3.47
Kentucky	69,523	62,255	-7,269	24	216	2.65
Louisiana	227,989	242,707	14,718	12	555	6.80
Maryland	17,677	15,869	-1,808	1	62	0.76
Michigan	501,622	464,985	-36,637	48	1,058	12.97
Minnesota	1,655	1,695	40	1	7	0.09
Mississippi	89,017	76,301	-12,715	7	136	1.67
Missouri	6,570	6,503	-67	1	31	0.37
Montana	19,871	31,551	11,680	5	375	4.60
Nebraska	7,994	6,604	-1,391	1	39	0.48
New Mexico	11,897	17,035	5,137	3	95	1.16
New York	76,212	62,760	-13,453	22	188	2.30
Ohio	197,493	186,680	-10,813	23	621	7.61
Oklahoma	107,198	133,328	26,130	13	381	4.67
Oregon	3,794	5,199	1,405	2	12	0.14
Pennsylvania	376,932	317,953	-58,979	59	727	8.92
Texas	302,473	364,222	61,749	33	663	8.13
Utah	32,368	45,323	12,955	4	122	1.50
Washington	20,124	22,139	2,015	1	34	0.42
West Virginia	200,267	165,742	-34,526	36	511	6.26
Wyoming	10,422	15,478	5,056	7	106	1.30
Total	2,871,901	2,883,212	11,311	406	8,159	100.00

Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-191, "Underground Gas Storage Report."

Table SR5. Natural Gas Delivered to Consumers by State, 1996

(Million Cubic Feet)

Year and State	Residential	Commercial	Industrial	Electric Utilities	Delivered to Consumers
Alabama	56,666	29,003	205,175	6,146	296,990
Alaska	16,179	24,990	75,616	31,767	148,552
Arizona	28,056	29,268	25,726	19,248	102,298
Arkansas	46,354	31,116	122,324	33,988	233,781
California	473,940	233,665	681,527	318,035	1,707,167
Colorado	111,045	69,252	84,273	5,511	270,081
Connecticut	43,764	39,730	32,706	10,456	126,655
Delaware	9,809	6,678	14,268	23,370	54,125
District of Columbia	17,482	16,219	0	0	33,701
Florida	16,381	41,667	137,351	283,557	478,956
Georgia	126,338	60,854	179,015	4,674	370,880
Hawaii	537	2,115	0	0	2,652
Idaho	14,936	11,526	34,573	0	61,034
Illinois	537,535	215,307	334,839	25,863	1,113,544
Indiana	181,822	91,872	290,093	4,330	568,117
Iowa	87,818	53,929	113,032	3,491	258,269
Kansas	85,074	68,067	130,980	22,607	306,727
Kentucky	71,193	41,343	94,470	1,836	208,841
Louisiana	57,043	25,831	NA	252,139	NA
Maine	971	2,571	2,036	0	5,578
Maryland	84,936	47,734	52,665	8,455	193,790
Massachusetts	113,493	95,286	98,759	45,037	352,575
Michigan	399,531	204,406	353,173	32,559	989,668
Minnesota	140,631	96,799	107,819	5,301	350,550
Mississippi	27,973	22,724	82,199	83,251	216,147
Missouri	137,214	73,164	69,929	5,223	285,530
Montana	22,602	14,943	17,362	470	55,377
Nebraska	46,714	41,000	28,994	2,351	119,060
Nevada	23,156	19,407	32,435	46,766	121,764
New Hampshire	7,015	6,954	4,623	3	18,595
New Jersey	209,080	143,212	190,431	25,825	568,547
New Mexico	35,932	27,775	20,464	29,969	114,140
New York	NA	NA	268,329	142,688	1,061,296
North Carolina	59,590	41,811	106,381	2,381	210,163
North Dakota	12,358	12,098	7,565	3	32,024
Ohio	375,884	189,648	349,369	2,867	917,769
Oklahoma	76,356	43,285	202,255	136,436	458,333
Oregon	33,224	25,553	88,842	14,015	161,633
Pennsylvania	275,013	155,253	258,435	7,239	695,939
Rhode Island	18,173	11,734	26,985	25,071	81,964
South Carolina	29,129	20,652	93,933	1,206	144,920
South Dakota	14,089	11,604	8,148	725	34,566
Tennessee	69,730	56,806	128,418	572	255,525
Texas	228,628	NA	2,071,780	1,039,155	3,566,301
Utah	54,344	29,544	42,335	3,428	129,651
Vermont	2,523	2,850	1,926	24	7,324
Virginia	76,818	58,649	84,864	10,275	230,607
Washington	62,652	48,167	114,620	6,590	232,030
West Virginia	37,175	29,288	51,432	205	118,099
Wisconsin	147,984	94,566	149,696	7,303	399,549
Wyoming	14,755	17,081	43,925	87	75,849
Total	5,225,131	3,208,521	8,784,183	2,732,496	19,950,332

NA = Not available.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table SR6. Average Prices of Natural Gas by State, 1996

(Dollars per Thousand Cubic Feet)

State	City Gate	Residential	Commercial	Industrial	Electric Utilities
Alabama	3.48	7.20	6.18	3.72	2.95
Alaska	1.58	3.42	2.29	1.52	1.44
Arizona	2.78	7.50	4.98	3.86	3.03
Arkansas	2.76	5.90	4.68	3.06	2.52
California	2.59	6.43	6.02	3.69	2.74
Colorado	2.71	4.32	3.57	2.04	2.08
Connecticut	5.11	10.08	7.37	4.80	2.81
Delaware	3.59	7.10	5.77	4.38	3.13
District of Columbia	—	8.84	7.09	—	NA
Florida	3.69	11.41	6.47	4.30	3.12
Georgia	3.76	6.66	5.82	4.59	2.88
Hawaii	6.05	19.91	14.52	—	NA
Idaho	2.24	5.18	4.55	3.02	NA
Illinois	3.27	5.27	4.91	4.14	2.62
Indiana	NA	5.49	4.58	3.42	3.48
Iowa	3.47	5.56	4.62	3.61	3.23
Kansas	3.07	5.66	4.79	2.32	2.25
Kentucky	3.41	5.57	5.04	3.87	3.49
Louisiana	3.13	6.75	6.12	NA	2.94
Maine	4.29	7.88	7.14	5.31	NA
Maryland	3.98	7.70	5.90	5.49	3.11
Massachusetts	4.01	8.93	6.77	5.45	3.09
Michigan	2.90	4.89	4.69	4.10	0.76
Minnesota	3.07	5.46	4.62	2.95	2.18
Mississippi	3.29	5.98	5.11	3.44	2.78
Missouri	3.25	5.97	5.34	4.35	2.58
Montana	3.03	4.89	4.72	4.88	2.89
Nebraska	3.06	5.34	4.47	3.30	2.07
Nevada	3.22	6.19	4.91	4.90	2.11
New Hampshire	4.20	7.34	6.76	4.87	—
New Jersey	3.82	7.37	7.04	3.77	2.95
New Mexico	1.99	4.30	3.18	2.63	2.31
New York	3.29	NA	NA	4.92	2.94
North Carolina	3.74	7.57	6.15	4.35	4.57
North Dakota	2.94	4.56	3.96	3.07	2.93
Ohio	4.37	5.88	5.38	4.66	3.44
Oklahoma	2.54	5.57	4.65	3.11	2.99
Oregon	2.42	6.25	4.86	3.23	1.33
Pennsylvania	3.97	7.39	6.38	4.19	2.85
Rhode Island	4.41	8.60	7.28	4.61	2.29
South Carolina	3.90	7.62	6.18	3.74	4.56
South Dakota	3.19	5.25	4.21	2.68	—
Tennessee	4.04	6.33	5.75	3.80	—
Texas	3.23	5.77	NA	2.61	2.51
Utah	2.25	4.47	3.38	2.03	—
Vermont	2.74	6.40	5.23	3.43	3.22
Virginia	3.89	7.94	5.85	4.28	2.98
Washington	2.44	5.63	4.79	2.70	4.98
West Virginia	3.33	7.05	6.02	2.87	2.99
Wisconsin	3.37	6.00	4.77	3.75	3.04
Wyoming	NA	4.16	3.44	3.01	12.59
Total	3.34	6.30	5.37	3.34	2.68

NA = Not available.
— = Not applicable.
Source: Energy Information Administration (EIA), Form EIA-857, “Monthly Report of Natural Gas Purchases and Deliveries to Consumers.”

Highlights

Overview

This issue of the *Natural Gas Monthly* presents the most recent estimates of natural gas supply, consumption, and prices from the Energy Information Administration (EIA). Besides describing the latest estimates, which run through April 1997 for many data series, this "Highlights" includes a review of natural gas data covering the 1996-97 heating season (November 1 through March 31).

Preceding sections of this issue contain two Special Reports of interest to readers. "Natural Gas 1996: Highlights" reviews data for 1996 based on EIA surveys. Prior issues still used monthly data estimates from the Short-Term Integrated Forecasting System to complete the year. "Natural Gas Pipeline and System Expansions" examines recent expansions to the interstate natural gas pipeline network and proposals for new projects. The report also covers projects in Canada and Mexico that tie in with U.S. projects.

Highlights of the most recent natural gas data are:

- The level of natural gas in underground storage remains near record lows but is significantly higher than last year. The April 1997 level of working gas of 1,131 billion cubic feet is 33 percent higher than at the end of April 1996.
- Net natural gas imports in April 1997 were 15 percent higher than in April 1996 as production remained flat and demand increased slightly.
- The national average wellhead price for natural gas increased only 1 percent from December 1996 to January 1997 reaching $3.58 per thousand cubic feet, but this is 72 percent higher (nominally) than the price in January 1996.

Recent Data

Supply

Dry natural gas production is estimated to be 1,573 billion cubic feet in April 1997, only 3 billion cubic feet lower than in April 1996 (Table 1). The daily rate for April 1997 of 52 billion cubic feet per day is less than 1 percent below the rate in March 1997. Cumulatively through April 1997, dry natural gas production, at 6,327 billion cubic feet, is nearly equal to the 1996 level of 6,320 billion cubic feet (Figure HI1).

The estimate of net withdrawals of natural gas from underground storage is a negative number for April 1997, indicating that the industry has switched over to making net injections in this first month of the refill season (April through October, also called the nonheating season). Net injections are estimated to be 133 billion cubic feet in April 1997, which is 17 percent higher than in April 1996 (Table 9).

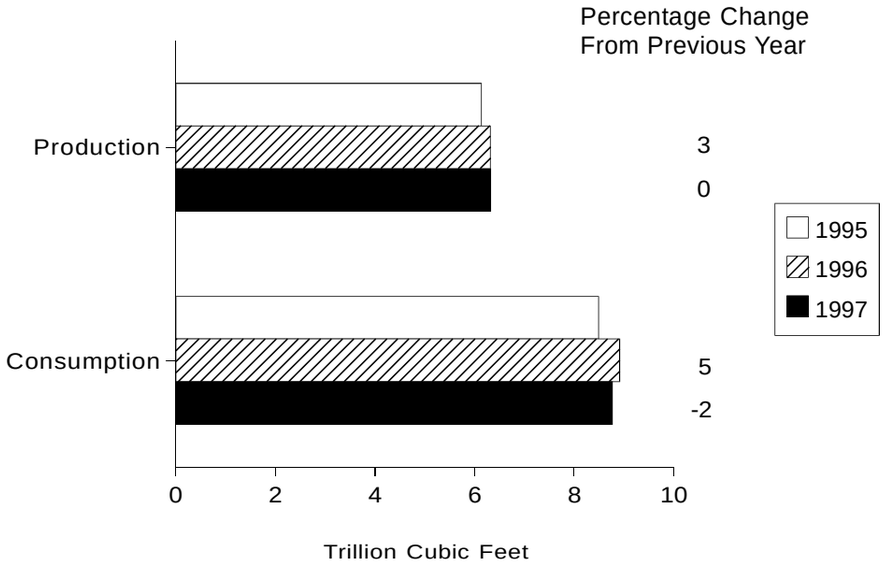
Revisions to storage estimates for March 1997 now show 999 billion cubic feet of working gas in underground storage at the end of the month. The net injections during April 1997 bring estimated working gas up to 1,131 billion cubic feet, 33 percent higher than at the end of April 1996. The level of working gas in April 1996 was the lowest recorded for the month (complete monthly records began in 1976) and the April 1997 estimate is the third lowest (Figure HI2).

With natural gas production virtually flat in April 1997 compared with 1 year ago, the level of net imports increased to meet the demand to refill storage and to supply the slight (1 percent) increase in end-use consumption during the month. Net imports for April 1997 are estimated to be 240 billion cubic feet, a 15-percent increase over the April 1996 level (Table 2). The daily volume in April 1997 of 8.0 billion cubic feet per day is 2 percent higher than in March 1997.

End-Use Consumption

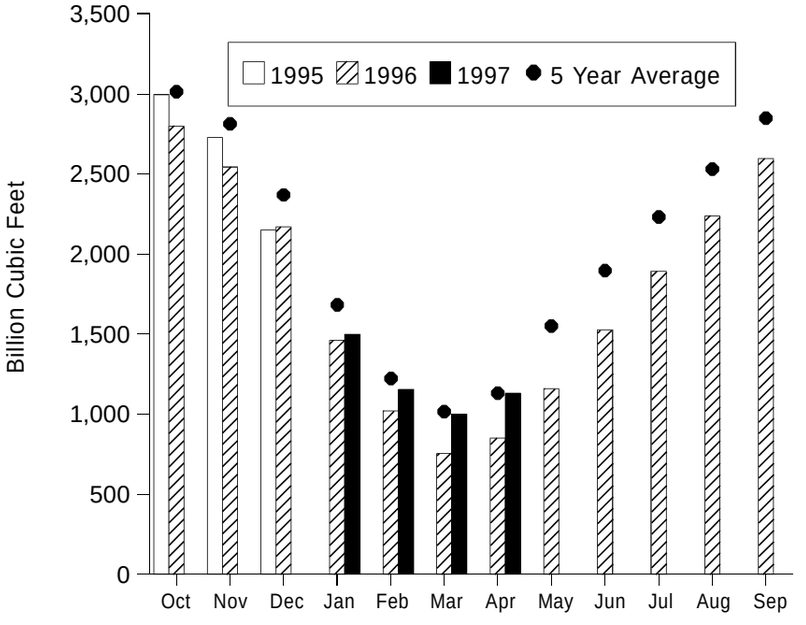
A change has been made in the presentation of end-use consumption data in Table 3. Beginning with this issue of the *Natural Gas Monthly*, the estimates of electric utility gas consumption derived from the Short-Term Integrated Forecasting System (STIFS) will not be published. These estimates have required significant revisions when data become available from monthly survey forms. Total Deliveries to Consumers and Total Consumption will still be published because significant revisions have not been required for these estimates.

Figure HI1. Natural Gas Production and Consumption, January-April, 1995-1997



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1995-1997



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1992 to 1996 while the January average is calculated from January levels for 1993 to 1997. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

End-use consumption of natural gas is estimated to be 1,840 billion cubic feet in April 1997, 1 percent higher than in April 1996 (Table 3). During the first several months of 1996, cold weather was more persistent than in 1997, especially in March, increasing the demand for natural gas for space heating. Thus, cumulative end-use consumption for January through April 1997 is 2 percent lower than for the same period in 1996.

Residential and commercial consumption are estimated to be 430 and 273 billion cubic feet, respectively, in April 1997. These levels are 9 and 5 percent lower, respectively, than in April 1996. Industrial consumption of natural gas is estimated to be 747 billion cubic feet in April 1997, 2 percent higher than 1 year earlier. Cumulatively through April 1997, industrial consumption is 1 percent higher than in 1996 (Figure HI3).

The most recent estimate of natural gas consumption by the electric utility sector is 139 billion cubic feet for January 1997. This is 17 percent lower than consumption in January 1996 and continues the trend during 1996 when monthly consumption was frequently more than 10 percent lower than it had been in 1995. The higher prices for natural gas seen by this sector during 1996, which are described in the next section, played a part in reducing consumption by electric utilities.

Prices

Preliminary estimates for most natural gas monthly price series are available through January 1997. In the electric utility sector, the most recent estimate is for December 1996, thus providing the first estimate of an annual price for 1996. The January 1997 wellhead price is little changed from its level in December 1996, while end-use prices have increased from their December 1996 levels. All natural gas price estimates in January 1997 are significantly higher than they were 1 year ago, with the wellhead price showing the most dramatic change.

The national average wellhead price for January 1997 is estimated to be $3.58 per thousand cubic feet, 1 percent higher than the December 1996 price (Table 4). However, the January 1997 estimate is 72 percent higher than the January 1996 price of $2.08 per thousand cubic feet (Figure HI4). Relatively low storage levels at the beginning of the 1996-97 heating season contributed to this rise in prices. See the following section for more discussion of wellhead prices during the 1996-97 heating season.

Estimated end-use prices in January 1997 also reflect substantial increases over the level of 1 year ago. Residential and commercial natural gas prices are estimated to be $6.69 and $6.06 per thousand cubic feet, respectively, in January 1997.[1] These levels are 19 and 15 percent higher, respectively, than in January 1996. The average price of natural gas for industrial users is estimated to be $4.58 per thousand cubic feet in January 1997. While this is 36 percent higher than in January 1996, the percentage increase is only half what occurred to average wellhead prices during the same period. End-use prices in all three sectors increased from December 1996 to January 1997. The increases were 5, 6, and 10 percent, respectively, in the residential, commercial, and industrial sectors.

The average price paid for natural gas by electric utilities increased 31 percent in December 1996, reaching $3.98 per thousand cubic feet. This is 54 percent higher than in December 1995. Monthly electric utility prices during 1996 have exceeded those of 1995 in every month. In 8 of the 12 months, the 1996 prices have been at least 35 percent greater than in the same month of the prior year.

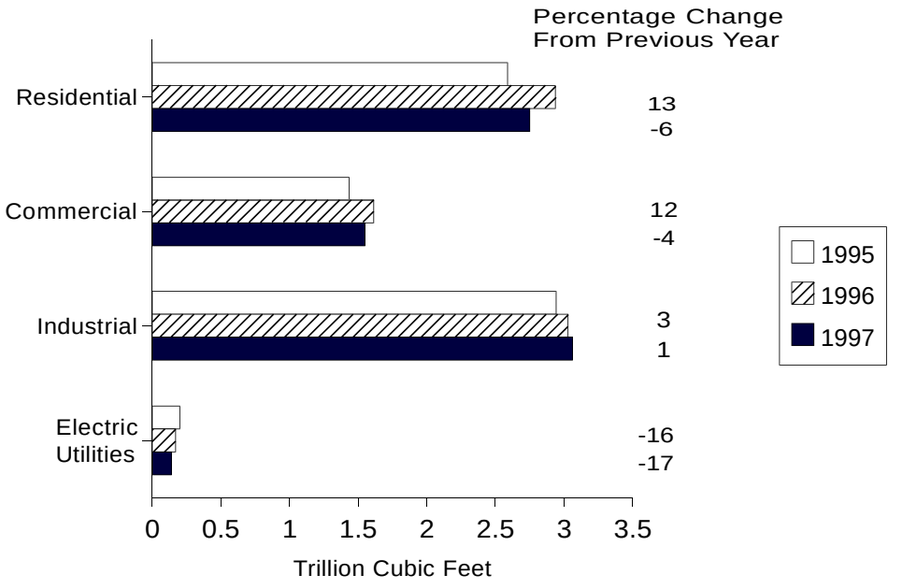
The annual average electric utility price for gas in 1996 is estimated to be $2.68 per thousand cubic feet. This is a 33-percent increase from the average price in 1995. Annual electric utility prices had fallen the previous 2 years, with nominal declines of 13 and 11 percent in 1994 and 1995, respectively.

The 1996-97 Heating Season

Despite generally normal to mild weather from December through March in most parts of the United States, the price of natural gas at the wellhead was up considerably compared with last winter. The average wellhead price from November 1996 through January 1997 was about 78 percent higher than the year-earlier level ($3.27 vs. $1.84 per thousand cubic feet). Contributing to the rise in wellhead prices was the historically low level of working gas in storage at the beginning of the heating season and unseasonably cold weather in November. Storage resources at the beginning of the heating season (November 1) were more than 250 billion cubic feet below the average level for working gas at the beginning of the previous four heating seasons (2,800 vs. 3,058 billion cubic feet). However, as the heating season progressed

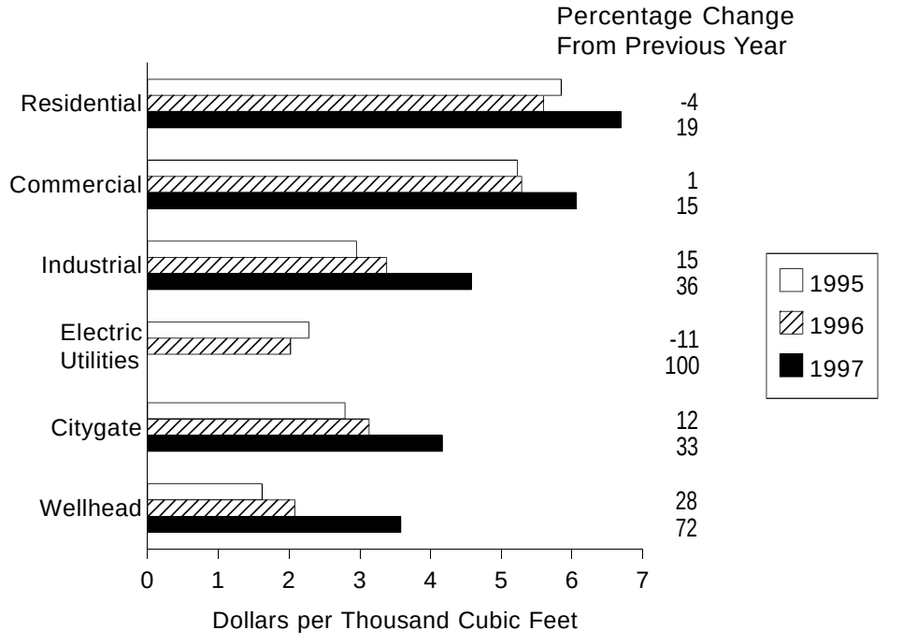
[1]End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1996 they were from 58 to 82 percent of commercial deliveries and only 15 to 22 percent of industrial deliveries (Table 4).

Figure HI3. Natural Gas Delivered to Consumers, January-April, 1995-1997



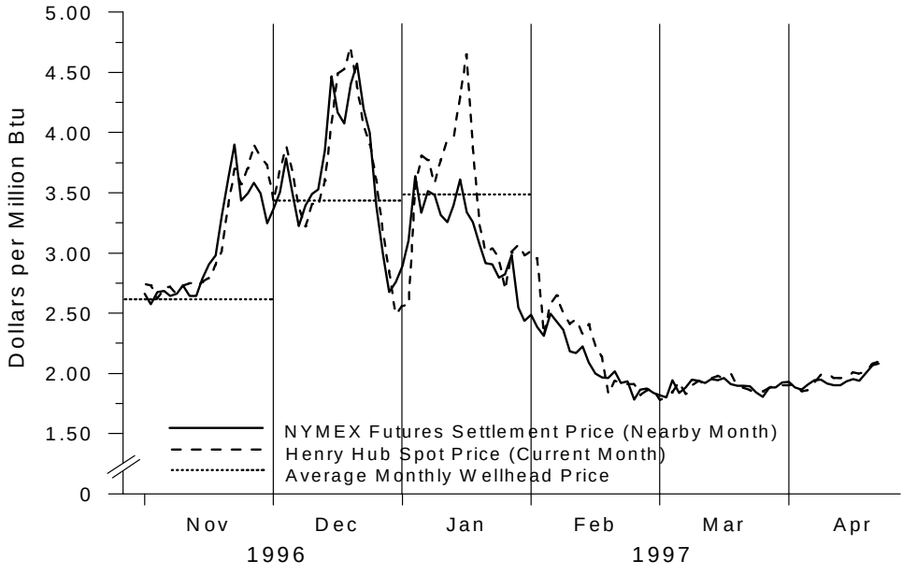
Note: Electric utility deliveries are for January only.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January 1995-1997



Note: Commercial and industrial average prices reflect onsystem sales only. Electric utility prices are for January through December for 1995 and 1996.
Source: Table 4.

Figure HI5. Futures and Spot Prices at the Henry Hub and Average Wellhead Price



Note: The futures price is for the contract that is to terminate trading next on the futures market. The spot price is the midpoint of the high and low daily prices at the Henry Hub.

Sources: **Futures Prices:** Commodity Futures Trading Commission, Division of Economic Analysis. **Spot Prices:** Pasha Publications, Inc., *Gas Daily*. **Wellhead Prices:** Table 4.

and the weather turned milder, storage volumes remained more than adequate and much improved over last year. Reports in the industry press indicate that wellhead prices declined by more than 35 percent during February and March in response to the continued mild weather.

Weather

The 1996-97 heating season (November through March) was 4 percent warmer than normal and almost 7 percent warmer than last year. According to National Oceanic and Atmospheric Administration (NOAA) data, the only region in the lower 48 States recording colder-than-normal weather was the West North Central, which had nearly 3 percent more heating degree days than normal for the period (Table 25). The season began on a much different note, as total heating degree days nationally during November were 18 percent greater than normal, with several regions recording 25 percent or more greater than normal (Table 25). December saw a dramatic shift in the weather, and for the entire month, heating degree days were 9 percent less than normal, with only the West North Central region recording an increase (2 percent). Though somewhat cooler, January's weather continued the pattern, and even milder weather followed in both February and March.

Storage

The level of working gas in storage at the start of the past heating season on November 1, 1996, was almost 200 billion cubic feet less (2,800 vs. 2,996 billion cubic feet) than at the beginning of the 1995-96 heating season. This raised concerns about whether or not storage inventories would be sufficient to meet demand during the upcoming winter, especially in light of the record net withdrawals of 2,324 billion cubic feet during the previous heating season. The warmer-than-normal heating season that followed resulted in relatively low demand for storage gas, and stocks remained ample throughout the winter.

Storage data through February 1997 indicate that net withdrawals for the 4 months beginning in November 1996 were 1,668 billion cubic feet—332 less than for the same time period last year (Table 9). The estimate from the Short-Term Integrated Forecasting System currently shows that only 156 billion cubic feet of working gas was withdrawn in March, leaving almost 1,000 billion cubic feet of gas remaining in storage at the end of the heating season. It appears likely that net withdrawals during the 1996-97 heating season were 400 to 500 billion cubic feet less than during the 1995-96 season.

Prices

Average wellhead prices were considerably higher during the past heating season than in 1995-96. The wellhead price of gas in November 1996 was almost 68 percent higher than in November 1995 ($2.70 vs. $1.61 per thousand cubic feet). The price difference between years became even larger in December, reaching nearly 92 percent ($3.53 vs. $1.84 per thousand cubic feet), and then narrowed somewhat in January to over 72 percent ($3.58 vs. $2.08). These year-to-year increases in the December and January wellhead prices are the largest ever recorded (monthly wellhead price records began in 1976). Before now, the largest increases were seen in the years following passage of the Natural Gas Policy Act of 1978. In the late 1970's and early 1980's, annual increases in the December and January wellhead prices were on the order of 20 to 35 percent nominally.

Concerns about record-low storage inventories contributed to the increase in average wellhead prices through the middle of the 1996-97 heating season compared with 1 year earlier. Strong demand for natural gas was created by the industry's need to replenish its depleted storage facilities during the refill season (April through October) following last winter's record withdrawals. Wellhead prices during the 1996 refill season were almost 40 percent higher than for the same period in 1995 (Table 4).

Spot prices at the Henry Hub also point toward higher wellhead prices this past heating season. Daily spot prices were generally in the $3 to $4.50 per million Btu range during December 1996 and January 1997, but were in the $2 to $4 per million Btu range a year earlier. Spot prices for natural gas, as reported in the industry press, were at their highest during the third week of January 1997 when they reached between $4.50 and $4.80 per million Btu at the Henry Hub in Louisiana and at other major market locations in Oklahoma and Texas. Prices began to decline after mid-January as the moderate temperatures in most parts of the country continued and concern about the status of the industry's storage resources lessened. By the first week of February, spot prices had decreased to less than $2.50 per million Btu, and by early March had dropped below $2.00. Prices on the New York Mercantile Exchange (NYMEX) futures market for gas deliveries at the Henry Hub displayed a similar trend. For example, the futures contract closed at $3.998 per million Btu for January delivery, $2.986 for February delivery, and then dropped to $1.780 for March.

The price of natural gas to residential end users was on average 16 percent higher during the first 3 months of the heating season compared with last year at the same time ($6.47 vs. $5.58 per thousand cubic feet) (Table 4). According to the Bureau of Labor Statistics (BLS) monthly data on consumer prices, the cost of natural gas to residential consumers increased by 4 percent nationally between October and November, another 4 percent between November and December, and 6 percent in January. Prices were virtually unchanged in February and then declined by 6 percent in March.

Table 1. Summary of Natural Gas Production in the United States, 1991-1997

(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production (Wet)	Extraction Loss[b]	Dry Gas Production[c]
1991 Total	21,750	2,772	276	170	18,532	835	17,698
1992 Total	22,132	2,973	280	168	18,712	872	17,840
1993 Total	22,726	3,103	414	227	18,982	886	18,095
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995							
January	2,043	311	34	21	1,677	78	1,599
February	1,822	276	30	20	1,495	70	1,426
March	2,026	314	32	20	1,660	77	1,582
April	1,945	287	32	21	1,604	75	1,530
May	1,997	291	33	24	1,649	77	1,572
June	1,910	264	31	28	1,587	74	1,513
July	1,960	264	31	26	1,639	76	1,563
August	1,965	284	30	22	1,628	76	1,552
September	1,914	276	33	25	1,581	74	1,507
October	1,988	319	34	25	1,610	75	1,535
November	2,045	331	33	24	1,657	77	1,580
December	2,128	348	35	26	1,719	80	1,639
Total	23,744	3,565	388	284	19,506	908	18,599
1996							
January	E2,083	E327	E31	E25	E1,700	79	1,621
February	E1,955	E310	E29	E23	E1,593	74	1,518
March	E2,064	E328	E30	E22	E1,684	78	1,605
April	E2,012	E305	E31	E23	E1,653	77	1,576
May	E2,001	E285	E30	E22	E1,665	78	1,588
June	E1,954	E291	E28	E19	E1,616	75	1,541
July	E2,009	E288	E31	E22	E1,668	78	1,590
August	E2,021	E299	E31	E22	E1,669	78	1,591
September	E1,967	E301	E29	E21	E1,615	75	1,540
October	E2,028	RE324	RE30	E21	RE1,654	77	R1,577
November	E2,045	E318	E29	E21	E1,677	E78	E1,599
December	RE2,144	RE331	E31	E22	RE1,761	E82	RE1,679
Total	RE24,284	RE3,708	RE359	E263	RE19,955	E930	RE19,025
1997							
January	RE2,104	RE329	E30	RE21	E1,723	E80	E1,643
February	E1,886	E293	E27	E19	E1,547	RE72	RE1,475
March(STIFS)	NA	NA	NA	NA	E1,716	E80	E1,636
April(STIFS)	NA	NA	NA	NA	E1,650	E77	E1,573
1997 YTD	NA	NA	NA	NA	E6,636	E309	E6,327
1996 YTD	E8,114	E1,271	E121	E93	E6,629	309	6,320
1995 YTD	7,835	1,188	128	83	6,436	300	6,136

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[b] Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Equal to marketed production (wet) minus extraction loss.

R = Revised Data.

E = Estimated Data.

RE = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1991-1994: Energy Information Administration (EIA), *Natural Gas Annual 1995.* January 1996 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation, estimating procedures, and revision policy.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1991-1997

(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels[a]	Net Imports	Net Storage Withdrawals[b]	Balancing Item[c]	Consumption[d]
1991 Total	17,698	113	1,644	80	-500	19,035
1992 Total	17,840	118	1,921	173	-508	19,544
1993 Total	18,095	119	2,210	-36	-110	20,279
1994 Total	18,821	111	2,462	-286	-400	20,708
1995						
January	1,599	12	240	613	-60	2,403
February	1,426	10	223	531	17	2,207
March	1,582	10	236	228	42	2,098
April	1,530	7	220	-51	74	1,780
May	1,572	8	216	-343	115	1,567
June	1,513	8	202	-380	52	1,395
July	1,563	8	208	-313	30	1,497
August	1,552	8	223	-212	-24	1,548
September	1,507	7	216	-321	-17	1,393
October	1,535	9	224	-210	-72	1,486
November	1,580	10	224	278	-206	1,886
December	1,639	12	256	595	-181	2,321
Total	18,599	110	2,687	415	-230	21,581
1996						
January	1,621	14	237	699	R-5	R2,566
February	1,518	12	215	447	R133	R2,326
March	1,605	12	209	324	R44	R2,194
April	1,576	11	209	-114	R146	R1,827
May	1,588	8	235	-328	R68	R1,570
June	1,541	10	212	-375	R72	R1,458
July	1,590	10	221	-369	R-14	R1,439
August	1,591	10	222	-345	R-1	R1,476
September	1,540	9	225	-364	R-20	R1,391
October	R1,577	10	237	-204	R-97	R1,523
November	E1,599	E12	R236	264	R-211	R1,899
December	RE1,679	E12	RE258	E376	R-85	RE2,240
Total	RE19,025	E130	RE2,715	E11	R30	RE21,911
1997						
January	E1,643	RE12	E239	E672	R-37	R2,529
February	RE1,475	E11	RE231	RE356	RE172	RE2,245
March(STIFS)	E1,636	RE11	E243	RE156	RE108	RE2,155
April(STIFS)	E1,573	E10	E240	E-133	E150	E1,840
1997 YTD	E6,327	E45	E953	E1,052	E393	E8,769
1996 YTD	6,320	49	870	1,356	318	8,913
1995 YTD	6,136	40	918	1,321	72	8,488

[a] Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility where they are gathered each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0026 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc., monthly value is added to the result to produce the monthly supplemental fuels estimate.

[b] Monthly and annual data for 1991 through 1995 include underground storage and liquefied natural gas storage. Data for January 1996 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

[c] Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

[d] Consists of pipeline fuel use, lease and plant fuel use, and deliveries to consuming sectors as shown in Table 3.

[R] = Revised Data.

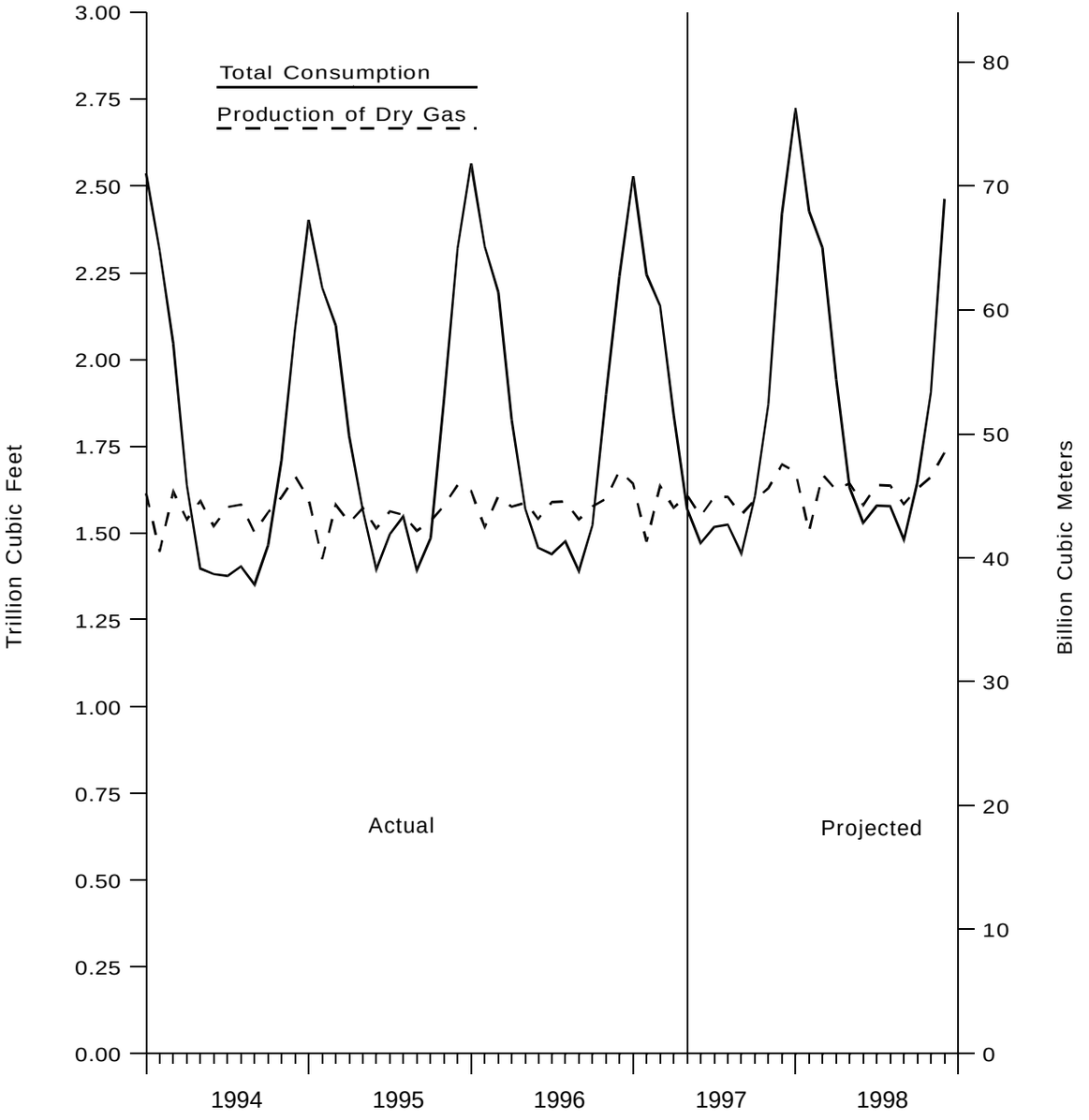
[E] = Estimated Data.

[RE] = Revised Estimated Data.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1991-1994: Energy Information Administration (EIA), *Natural Gas Annual 1995,* 1994-1995: EIA: Form EIA-627, "Annual Quantity and Value of Natural Gas Report" (1995 data only), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, "Underground Natural Gas Storage Report," Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," EIA computations and *Natural Gas Annual 1995.* January 1996 through current month: EIA, Form EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-191, EIA computations and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports. See Appendix A for dicussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1994-1998



Sources: 1993 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook* (October 1996).

Table 3. Natural Gas Consumption in the United States, 1991-1997

(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel[a]	Pipeline Fuel[b]	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1991 Total	1,129	601	4,556	2,729	7,231	2,789	17,305	19,035
1992 Total	1,171	588	4,690	2,803	7,527	2,766	17,786	19,544
1993 Total	1,172	624	4,956	2,863	7,981	2,682	18,483	20,279
1994 Total	1,124	685	4,848	[c]2,897	8,167	2,987	18,899	20,708
1995								
January	105	79	816	427	777	199	2,218	2,403
February	94	73	754	411	707	168	2,040	2,207
March	104	69	600	342	738	245	1,926	2,098
April	100	58	419	254	720	229	1,622	1,780
May	103	50	260	184	711	258	1,414	1,567
June	99	45	159	133	663	297	1,252	1,395
July	101	48	131	133	677	407	1,347	1,497
August	101	50	114	130	684	468	1,397	1,548
September	99	45	134	130	670	316	1,250	1,393
October	102	48	216	171	709	240	1,336	1,486
November	105	61	489	297	736	198	1,720	1,886
December	109	76	758	420	786	172	2,136	2,321
Total	1,220	700	4,850	[c]3,034	8,580	3,197	19,660	21,581
1996								
January	106	[R]83	931	[R]485	[R]792	168	[R]2,376	[R]2,566
February	100	[R]75	829	[R]445	741	137	[R]2,151	[R]2,326
March	105	[R]71	705	[R]393	763	156	[R]2,017	[R]2,194
April	103	[R]59	[R]474	[R]288	[R]734	170	[R]1,665	[R]1,827
May	104	51	[R]270	[R]187	694	[R]264	[R]1,415	[R]1,570
June	101	[R]47	162	[R]138	710	[R]299	[R]1,310	[R]1,458
July	104	47	[R]125	[R]127	678	[R]358	[R]1,288	[R]1,439
August	104	48	118	[R]128	[R]711	[R]367	[R]1,324	[R]1,476
September	101	45	137	[R]130	[R]692	285	[R]1,245	[R]1,391
October	104	[R]49	[R]241	[R]175	[R]727	226	[R]1,370	[R]1,523
November	105	62	[R]499	[R]298	[R]766	170	[R]1,733	[R]1,899
December	110	73	735	[R]413	[R]776	132	[R]2,057	[RE]2,240
Total	1,249	[R]711	[R]5,225	[R]3,209	[R]8,784	[R]2,732	[R]19,950	[RE]21,911
1997								
January	108	[R]82	[R]909	[R]487	[R]804	[R]139	2,339	[R]2,529
February	[RE]100	[E]75	[E]768	[RE]426	[E]733	NA	[RE]2,071	[RE]2,245
March	[E]103	[E]69	[E]644	[E]363	[E]779	NA	[RE]1,983	[RE]2,155
April	[E]101	[E]58	[E]430	[E]273	[E]747	NA	[E]1,681	[E]1,840
1997 YTD[d]	[E]412	[E]284	[E]2,751	[E]1,548	[E]3,063	139	[E]8,073	[E]8,769
1996 YTD	415	289	2,938	1,611	3,030	168	8,209	8,913
1995 YTD	403	278	2,589	1,434	2,942	199	7,806	8,488

[a] Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[b] Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption (excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Total may not equal sum of the twelve months because gas volues delivered for use as vehicle fuel are included in the annual total but not in the monthly components. Vehicle fuel deliveries were 1.7 billion cubic feet in 1994 and 2.7 billion cubic feet in 1995.

[d] Year-to-date volume represents months for which volume information is available in the current year.

[R] = Revised Data.

[E] = Estimated Data.

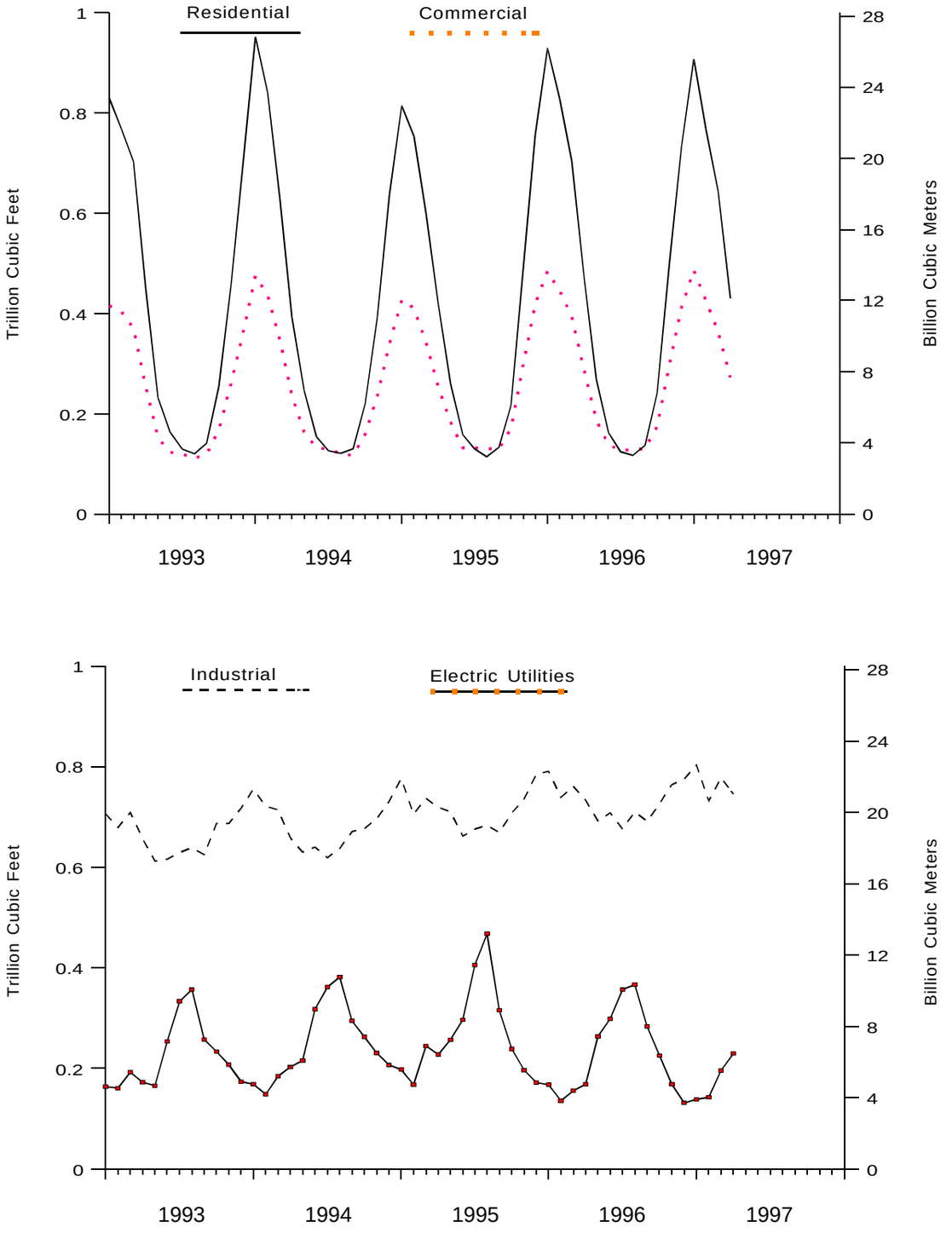
[RE] = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1991-1994: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1995.* January 1996 through the current month: EIA: Form 895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1993-1997



Sources: *Natural Gas Annual*, Form EIA-857, and Form EIA-759.

Table 4. Selected National Average Natural Gas Prices, 1991-1997

(Dollars per Thousand Cubic Feet)

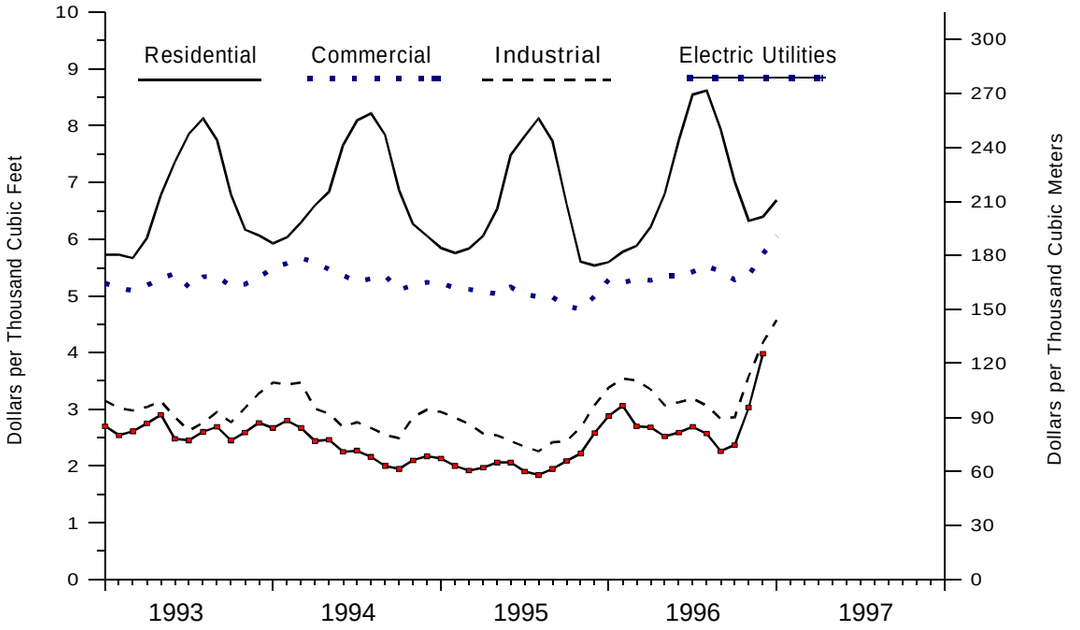
Year and Month	Wellhead Price[a]	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total[b]	Price	% of Total[b]	
1991 Annual Average	1.64	2.90	5.82	4.81	85.1	2.69	32.7	2.18
1992 Annual Average	1.74	3.01	5.89	4.88	83.2	2.84	30.3	2.36
1993 Annual Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995								
January	1.62	2.79	5.85	5.23	81.6	2.95	27.3	2.13
February	1.48	2.71	5.76	5.14	81.7	2.85	27.4	2.00
March	1.47	2.74	5.84	5.12	81.2	2.74	26.5	1.92
April	1.52	2.72	6.06	5.08	77.2	2.57	25.4	1.97
May	1.55	2.80	6.54	5.04	71.8	2.54	23.6	2.06
June	1.58	2.89	7.49	5.16	71.4	2.44	24.5	2.06
July	1.43	2.89	7.82	5.03	67.3	2.34	22.2	1.90
August	1.43	2.87	8.13	4.99	66.6	2.26	21.8	1.84
September	1.52	2.89	7.73	4.98	67.9	2.42	22.0	1.95
October	1.54	2.83	6.62	4.82	69.7	2.44	22.5	2.09
November	1.61	2.67	5.61	4.77	75.6	2.68	24.7	2.22
December	1.84	2.83	5.54	5.00	79.2	3.07	25.0	2.58
Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996								
January	2.08	3.13	5.60	[R]5.29	[R]76.1	3.38	21.7	2.88
February	1.90	3.16	5.78	[R]5.24	[R]76.8	3.54	[R]20.6	3.06
March	2.03	3.17	5.89	[R]5.30	[R]74.4	[R]3.51	[R]19.3	2.70
April	2.13	3.22	6.22	[R]5.28	[R]72.2	3.35	[R]18.7	2.68
May	2.04	3.18	6.80	[R]5.36	[R]66.9	3.07	17.5	2.52
June	2.13	3.39	7.75	[R]5.36	[R]62.7	3.12	15.6	2.59
July	2.33	[R]3.48	[R]8.55	[R]5.43	[R]61.3	3.19	[R]17.2	2.69
August	2.19	3.47	[R]8.62	[R]5.53	[R]58.6	3.06	14.8	[R]2.57
September	1.87	3.03	7.94	[R]5.43	[R]59.2	2.83	14.6	2.26
October	1.93	2.93	7.02	[R]5.29	[R]62.0	2.86	15.8	2.37
November	[E]2.70	[R]3.46	[R]6.33	[R]5.37	[R]68.7	3.58	16.6	3.03
December	3.53	[R]4.20	[R]6.40	5.74	71.0	4.17	[R]18.2	3.98
Annual Average	[E]2.25	3.34	6.30	[R]5.37	70.4	3.34	17.6	2.68
1997								
January	[E]3.58	4.17	6.69	6.06	70.9	4.58	17.9	NA

[a] See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly* (NGM) for discussion of wellhead prices.
[b] Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 24 for breakdown by State.
[R] = Revised Data.
[E] = Estimated Data.
NA = Not Available.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia.

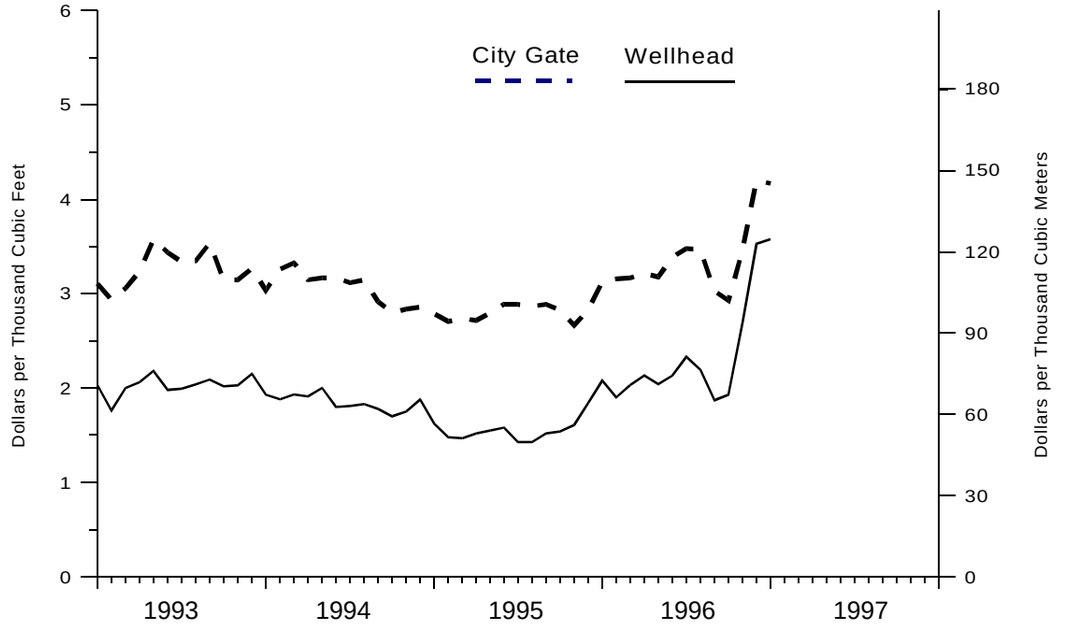
Sources: 1990-1994: Energy Information Administration (EIA) *Natural Gas Annual 1995.* 1994-1995 Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1996 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the United States, 1993-1997



Source: Table 4.

Figure 4. Average Price of Natural Gas in the United States, 1993-1997



Source: Table 4.

Table 5. U.S. Natural Gas Imports, by Country, 1991-1997

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Algeria		United Arab Emrites		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1991 Total	1,709,716	1.81	—	—	63,596	2.36	—	—	1,773,313	1.83
1992 Total	2,094,387	1.84	—	—	43,116	2.54	—	—	2,137,504	1.85
1993 Total	2,266,751	2.02	1,678	1.94	81,685	2.20	—	—	2,350,115	2.03
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	—	—	2,623,839	1.87
1995										
January	250,666	1.59	158	1.38	2,511	2.40	—	—	253,335	1.60
February	233,404	1.45	0	—	2,573	1.81	—	—	235,977	1.46
March	247,578	1.39	150	1.50	2,621	2.45	—	—	250,349	1.40
April	231,745	1.37	0	—	0	—	—	—	231,745	1.37
May	225,682	1.45	0	—	2,576	1.89	—	—	228,259	1.46
June	217,456	1.47	0	—	0	—	—	—	217,456	1.47
July	222,652	1.40	0	—	0	—	—	—	222,652	1.40
August	233,419	1.33	824	1.53	2,648	2.42	—	—	236,891	1.34
September	223,836	1.43	3,872	1.53	0	—	—	—	227,708	1.43
October	234,284	1.48	1,718	1.56	0	—	—	—	236,003	1.48
November	233,857	1.60	0	—	2,487	2.47	—	—	236,344	1.61
December	261,828	1.79	0	—	2,502	2.65	—	—	264,329	1.80
Total	2,816,408	1.48	6,722	1.53	17,918	2.30	—	—	2,841,048	1.49
1996										
January	247,111	2.04	1,498	2.03	2,460	2.81	—	—	251,070	2.05
February	225,127	1.96	698	2.14	2,512	2.79	—	—	228,338	1.97
March	219,987	1.90	1,259	2.17	2,599	3.06	—	—	223,845	1.91
April	212,618	1.80	1,392	2.18	4,559	2.50	—	—	218,570	1.81
May	236,444	1.72	4,067	2.15	2,612	2.58	—	—	243,123	1.73
June	223,051	1.71	712	2.35	0	—	—	—	223,763	1.71
July	231,167	1.78	1,304	2.57	2,642	3.00	—	—	235,114	1.79
August	236,581	1.77	31	1.70	2,629	2.56	—	—	239,241	1.78
September	232,622	1.67	771	1.69	0	—	2,524	R3.34	235,917	1.69
October	242,698	R1.98	1,110	R2.36	5,116	R2.96	0	—	248,924	R2.00
November	243,835	R2.28	R981	R2.85	5,031	R2.60	0	—	R249,847	R2.29
December	R262,173	R2.71	96	R3.29	5,164	R2.61	2,425	R3.57	R269,858	R2.71
Total	R2,813,415	R1.95	R13,919	R2.24	35,325	2.73	4,949	R3.45	R2,867,608	R1.97
1997										
January	E238,778	NA	E1,000	NA	7,560	NA	2,417	NA	E249,755	NA
February	E233,743	NA	E1,000	NA	7,667	NA	0	—	E242,410	NA
1997 YTD	E472,521	NA	E2,000	NA	15,227	NA	2,417	NA	E492,165	NA
1996 YTD	472,238	2.00	2,196	2.06	4,973	2.80	0	NA	479,407	2.01
1995 YTD	484,070	1.52	158	1.38	5,084	2.10	—	—	489,312	1.53

R = Revised Data.
E = Estimated Data.
NA = Not Available.
— = Not Applicable.

Sources: 1991-1995: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the Natinonal Energy Board of Canada plus EIA estimmates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1991-1997

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Total	
	Canada		Mexico		Japan			
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1991 Total	14,791	1.91	60,448	1.76	54,005	3.71	129,244	2.59
1992 Total	67,777	1.83	95,973	1.90	52,532	3.43	216,282	2.25
1993 Total	44,518	2.14	39,676	2.02	55,989	3.34	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	161,738	2.50
1995								
January	2,518	2.00	5,576	1.54	5,541	3.35	13,635	2.36
February	2,016	2.02	5,542	1.32	5,557	3.38	13,115	2.30
March	2,387	1.92	6,670	1.36	5,573	3.39	14,630	2.22
April	2,457	1.84	5,941	1.49	3,741	3.47	12,138	2.17
May	1,931	2.01	6,848	1.58	3,698	3.54	12,477	2.23
June	2,106	1.91	7,945	1.59	5,556	3.59	15,606	2.34
July	2,446	1.82	6,526	1.39	5,581	3.58	14,552	2.30
August	2,558	1.77	3,431	1.29	7,531	3.47	13,520	2.60
September	3,336	2.03	2,378	1.47	5,656	3.36	11,370	2.58
October	2,929	1.91	5,588	1.63	3,733	3.30	12,250	2.21
November	1,627	2.21	3,535	1.65	7,518	3.29	12,679	2.69
December	1,244	2.43	1,303	1.82	5,599	3.31	8,146	2.94
Total	27,554	1.96	61,283	1.50	65,283	3.41	154,119	2.39
1996								
January	6,856	3.22	1,608	1.98	5,534	3.38	13,998	3.14
February	5,275	2.74	2,000	1.82	5,619	3.29	12,894	2.84
March	6,785	2.80	2,861	1.81	5,642	R3.55	15,288	R2.89
April	2,430	2.22	R1,924	1.69	5,653	3.57	R10,007	2.88
May	2,809	2.15	1,900	1.84	3,750	3.61	8,459	2.72
June	3,001	2.25	3,486	2.15	5,651	R3.65	12,138	R2.87
July	3,776	2.45	3,061	2.23	7,546	3.66	14,383	3.04
August	2,197	2.30	9,176	2.11	5,667	R3.67	17,040	R2.65
September	2,514	1.94	2,389	1.73	5,661	R3.73	10,564	R2.85
October	R4,312	R1.97	R1,989	R1.85	5,588	R3.84	R11,889	R2.83
November	R6,473	R2.76	R1,533	R2.56	5,670	R4.01	R13,676	R3.25
December	R4,437	R3.75	R1,916	R3.72	5,661	R3.73	R12,014	R3.73
Total	R50,865	R2.67	R33,843	R2.11	67,642	R3.64	R152,350	R2.98
1997								
January	E4,000	NA	E1,500	NA	5,604	NA	E11,104	NA
February	E4,000	NA	E1,500	NA	5,596	NA	E11,096	NA
1997 YTD	E8,000	NA	E3,000	NA	11,201	NA	E22,201	NA
1996 YTD	12,131	3.01	3,608	1.89	11,153	3.33	26,892	3.00
1995 YTD	4,534	2.01	11,118	1.43	11,098	3.37	26,750	2.33

R = Revised Data.
E = Estimated Data.
NA = Not Available.

Sources: 1991-1995: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1990-1996

(Million Cubic Feet)

Year and Month	Alabama[b]	Alaska	California	Colorado	Florida	Kansas
1990 Total	135,276	402,907	362,748	242,997	6,483	573,603
1991 Total	170,847	437,822	378,384	285,961	4,884	628,459
1992 Total	355,099	443,597	365,632	323,041	6,657	658,007
1993 Total	388,024	430,350	315,851	400,985	7,085	686,347
1994						
January	44,067	50,827	27,310	38,036	577	70,766
February	40,980	45,039	24,382	34,940	547	61,683
March	44,744	49,620	26,375	36,897	676	64,086
April	43,693	45,666	25,257	37,572	602	56,981
May	44,215	45,550	25,518	40,769	621	58,238
June	38,749	40,960	24,511	35,514	616	55,058
July	45,135	43,113	24,954	37,317	676	54,985
August	44,742	42,578	24,997	37,806	634	52,903
September	36,261	43,579	24,657	37,957	586	49,373
October	44,570	47,611	26,676	39,150	712	56,433
November	44,164	48,949	26,773	38,570	629	62,760
December	43,953	51,909	28,017	38,681	610	69,466
Total	515,272	555,402	309,427	453,207	7,486	712,730
1995						
January	43,456	43,391	24,674	47,253	559	64,211
February	39,652	38,966	22,028	41,958	570	60,635
March	43,734	43,037	23,829	45,291	598	59,382
April	42,727	39,714	22,819	45,021	578	59,555
May	44,169	39,308	23,055	45,187	604	61,639
June	42,737	35,781	22,145	42,589	535	58,686
July	45,521	36,246	22,545	43,042	537	59,830
August	45,244	35,724	22,584	43,105	502	58,451
September	37,523	36,488	22,276	41,295	508	53,756
October	45,123	39,695	24,100	45,563	475	58,743
November	44,954	39,324	24,188	45,440	497	60,691
December	44,820	41,874	25,312	37,338	502	65,856
Total	519,661	469,550	279,555	523,084	6,463	721,436
1996						
January	32,816	44,811	20,482	44,982	518	62,504
February	30,858	40,581	22,766	[E]40,221	493	62,213
March	33,269	43,896	24,525	46,594	460	62,554
April	31,604	39,838	23,836	41,542	456	60,401
May	32,749	36,479	23,932	45,656	483	61,727
June	31,136	37,470	23,137	[R]40,521	503	55,896
July	30,947	37,404	24,356	37,626	500	[E]56,667
August	[R]31,157	37,379	24,405	[E]38,378	540	[E]54,730
September	[R]30,030	38,181	23,683	44,665	537	[E]50,729
October	[R]30,029	41,339	24,090	48,808	468	[E]57,158
November	31,598	40,859	24,307	[E]48,887	517	[E]61,870
December	32,684	44,325	24,998	[E]47,347	531	[E]68,052
Total	378,877	482,563	284,518	[E]525,227	6,006	[E]714,501

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1990-1996

(Million Cubic Feet) — Continued

Year and Month	Louisiana	Michigan	Mississippi	Montana	New Mexico	North Dakota
1990 Total	5,241,989	172,151	94,616	50,429	965,104	52,169
1991 Total	5,034,361	195,749	108,031	51,999	1,038,284	53,479
1992 Total	4,914,300	194,815	91,697	53,867	1,268,863	54,883
1993 Total	4,991,138	204,635	80,695	54,528	1,409,429	59,851
1994						
January	436,652	27,679	5,804	4,928	129,078	5,050
February	397,987	3,071	5,339	4,469	120,161	4,584
March	431,867	35,710	5,877	4,562	131,176	5,040
April	419,226	7,755	5,340	4,384	126,005	5,026
May	433,421	25,719	5,339	4,078	131,960	5,139
June	416,200	18,410	5,152	3,347	125,074	4,862
July	429,523	20,693	5,059	3,392	126,762	4,845
August	431,139	18,210	5,430	3,753	132,241	4,790
September	406,044	20,327	5,855	3,924	128,437	4,520
October	424,145	15,412	4,812	4,451	133,438	4,837
November	457,484	18,566	4,621	4,476	134,477	4,615
December	486,016	11,105	4,820	4,652	138,880	4,497
Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805
1995						
January	437,237	22,536	7,664	4,919	134,508	4,284
February	386,483	7,882	6,874	4,278	125,334	3,933
March	417,303	31,418	7,651	4,716	136,983	4,410
April	411,156	17,507	7,408	4,381	131,657	4,111
May	432,964	19,427	8,138	4,153	137,827	4,313
June	412,412	25,052	7,836	3,420	130,688	4,186
July	432,943	23,349	7,959	3,493	132,372	3,615
August	420,784	19,129	8,685	3,570	138,073	4,128
September	422,232	21,698	8,783	3,734	134,030	4,129
October	401,813	19,548	8,429	4,345	139,330	4,239
November	452,671	15,086	7,874	4,566	140,166	4,019
December	480,368	15,569	8,233	4,690	144,869	4,101
Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468
1996						
January	[E]457,580	22,482	8,089	4,503	[E]143,656	4,109
February	[E]427,338	19,173	7,386	4,266	[E]133,884	3,753
March	[E]448,513	11,499	8,385	4,443	[E]146,302	4,048
April	[E]435,818	32,907	8,225	4,098	[E]140,455	3,924
May	[E]452,471	18,490	9,026	4,244	[E]147,208	4,106
June	[E]437,816	24,185	8,983	3,496	[E]139,613	3,847
July	460,981	27,825	9,335	3,603	132,637	3,894
August	[E]459,033	23,866	9,193	4,050	134,516	4,066
September	448,022	20,734	8,641	4,172	129,296	4,153
October	435,727	20,904	8,996	4,625	130,917	4,268
November	470,333	16,612	8,487	[E]4,714	131,772	4,134
December	[E]494,812	13,667	8,518	[E]4,906	136,236	4,178
Total	[E]5,428,444	252,344	103,263	[E]51,119	[E]1,646,492	48,479

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1990-1996

(Million Cubic Feet) — Continued

Year and Month	Oklahoma	Texas	Utah	Wyoming	Other[a] States	U.S. Total
1990 Total	2,258,471	6,343,146	145,875	735,728	810,100	18,593,792
1991 Total	2,153,852	6,280,654	144,817	776,528	788,328	18,532,439
1992 Total	2,017,356	6,145,862	171,293	842,576	804,264	18,711,808
1993 Total	2,049,942	6,249,624	225,401	634,957	793,072	18,981,915
1994						
January	171,629	528,320	21,029	60,965	68,053	1,690,770
February	153,271	483,082	21,411	51,424	62,700	1,515,069
March	165,150	545,090	23,603	59,852	65,860	1,696,185
April	158,384	527,495	23,079	62,747	62,775	1,611,987
May	159,521	541,020	23,787	60,321	63,310	1,668,527
June	153,088	526,703	22,146	57,577	64,221	1,592,186
July	155,458	552,900	22,953	58,805	62,977	1,649,547
August	155,505	552,428	23,515	61,520	64,475	1,656,664
September	153,321	516,610	21,778	57,555	62,034	1,572,818
October	167,006	520,821	23,073	54,632	65,900	1,633,678
November	167,314	524,747	22,151	54,457	64,823	1,679,577
December	175,216	534,628	22,333	56,164	71,568	1,742,516
Total	1,934,864	6,353,844	270,858	696,018	778,697	19,709,525
1995						
January	160,707	528,857	22,354	62,919	67,114	1,676,643
February	143,517	479,553	21,686	50,369	61,666	1,495,384
March	154,640	538,515	25,813	57,602	64,772	1,659,694
April	148,305	523,631	24,529	59,544	61,518	1,604,162
May	149,369	539,311	22,498	54,039	62,686	1,648,688
June	143,346	526,759	15,626	51,792	63,404	1,586,994
July	145,565	548,617	17,120	55,403	61,316	1,639,474
August	145,609	545,415	17,676	57,125	62,409	1,628,213
September	143,565	520,687	18,447	51,741	59,968	1,580,857
October	156,378	524,049	16,987	57,494	63,946	1,610,256
November	156,667	522,744	18,062	56,956	63,084	1,656,989
December	164,066	531,909	20,493	58,792	70,326	1,719,118
Total	1,811,734	6,330,048	241,290	673,775	762,209	19,506,474
1996						
January	[E]160,437	543,853	19,998	62,922	[E]66,703	[E]1,700,444
February	[E]147,253	514,791	18,027	58,344	[E]61,285	[E]1,592,633
March	[E]154,752	546,612	21,650	61,854	[E]64,236	[E]1,683,591
April	[E]148,412	532,218	[E]20,864	66,987	[E]61,028	[E]1,652,612
May	[E]149,174	537,408	21,035	58,990	[E]61,940	[E]1,665,117
June	[E]144,004	529,989	20,759	51,535	[E]63,073	[RE]1,615,961
July	[E]145,901	546,323	20,573	62,384	[E]67,230	[E]1,668,187
August	146,102	[E]549,279	[E]21,137	62,393	[E]68,799	[RE]1,669,023
September	143,935	519,341	21,589	61,413	[E]66,053	[RE]1,615,175
October	155,859	538,164	22,152	60,089	[E]70,450	[RE]1,654,042
November	[E]156,333	527,176	21,606	57,830	[E]69,790	[E]1,676,826
December	163,208	557,347	21,376	61,104	[E]77,637	[E]1,760,927
Total	[E]1,815,370	[E]6,442,501	[E]250,767	725,845	[E]798,225	[E]19,954,540

[a] Includes Arizona, Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1996 monthly values for these States are estimated.

[b] The 1992, 1993, 1994, and 1995 monthly and annual values include Federal Offshore production.

[R] = Revised Data.

[E] = Estimated Data.

[RE] = Revised Estimated Data.

Notes: Data for 1990 through 1995 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1990-1993: Energy Information Administration (EIA), *Natural Gas Annual 1995* 1994 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State, December 1996

(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	36,381	1,048	37,429	2,159	2,427	160	32,684
Alaska	17,696	287,833	305,529	260,634	0	570	44,325
California	7,653	26,263	33,917	8,780	93	45	24,998
Colorado	E40,607	E7,749	E48,356	E917	0	E92	E47,347
Florida	0	600	600	0	69	0	531
Kansas	E60,048	E8,188	E68,236	E116	0	E68	E68,052
Louisiana	E435,431	E65,458	E500,889	E3,928	0	E2,149	E494,812
Michigan	11,234	2,809	14,043	195	0	180	13,667
Mississippi	9,591	554	10,145	706	701	220	8,518
Montana	E4,347	E608	E4,955	E6	0	E43	E4,906
New Mexico	117,525	19,921	137,446	794	275	141	136,236
North Dakota	1,475	3,152	4,627	241	8	199	4,178
Oklahoma	E137,227	E25,981	E163,208	0	0	0	163,208
Texas	494,172	119,587	613,759	39,722	14,107	2,583	557,347
Utah	18,963	3,975	22,938	141	0	1,422	21,376
Wyoming	89,386	9,756	99,141	12,012	13,004	13,021	61,104
Other States	E74,839	E4,177	E79,016	E699	E37	E643	E77,637
Total	RE1,556,578	RE587,658	RE2,144,236	RE331,051	RE30,721	RE21,536	E1,760,927

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.
E = Estimated Data.
RE = Revised Estimated Data.
Notes: All monthly data are considered preliminary until publication of the Natural Gas Annual for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.
Source: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1991-1997

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[b]	Volume	Percent	Injections	Withdrawals	Net Withdrawals[c]
1991 Total	3,954	2,824	6,778	-244	-8.0	2,608	2,689	80
1992 Total	4,044	2,597	6,641	-227	-8.0	2,555	2,724	168
1993 Total	4,327	2,322	6,649	-275	-10.6	2,760	2,717	-43
1994 Total	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995								
January	4,365	2,045	6,410	466	29.5	45	644	599
February	4,368	1,542	5,910	451	41.4	44	564	519
March	4,362	1,332	5,694	374	39.0	104	327	223
April	4,360	1,379	5,740	207	17.7	177	127	-49
May	4,393	1,668	6,061	114	7.3	369	34	-335
June	4,406	2,014	6,420	118	6.2	410	40	-371
July	4,340	2,301	6,641	28	1.2	359	54	-306
August	4,339	2,495	6,834	-112	-4.3	293	86	-207
September	4,341	2,802	7,143	-110	-3.8	343	29	-313
October	4,338	2,996	7,334	-79	-2.6	274	68	-205
November	4,342	2,728	7,070	-249	-8.4	96	367	272
December	4,349	2,153	6,503	-453	-17.4	53	635	582
Total	—	—	—	—	—	2,566	2,974	408
1996								
January	4,348	1,461	5,809	-584	-28.6	48	746	699
February	4,342	1,019	5,361	-522	-33.9	95	542	447
March	4,284	755	5,039	-577	-43.3	77	401	324
April	4,306	851	5,156	-529	-38.3	225	111	-114
May	4,325	1,158	5,483	-511	-30.6	371	43	-328
June	4,334	1,525	5,860	-489	-24.3	408	33	-375
July	4,329	1,893	6,223	-408	-17.7	415	46	-369
August	4,326	2,240	6,565	-255	-10.2	396	50	-345
September	4,331	2,597	6,928	-205	-7.3	393	29	-364
October	4,329	2,800	7,128	-196	-6.6	272	68	-204
November	4,333	2,544	6,878	-184	-6.8	88	351	264
December	4,335	2,170	6,505	17	0.8	85	461	376
Total	—	—	—	—	—	2,872	2,883	11
1997								
January	4,334	1,497	5,831	36	2.4	59	732	672
February	4,336	1,154	5,491	135	13.3	49	405	[R]356
March(STIFS)	[RE]4,336	[RE]999	[RE]5,335	[RE]243	[RE]32.2	NA	NA	[RE]156
April(STIFS)	[E]4,336	[E]1,131	[E]5,468	[E]281	[E]33.0	NA	NA	[E]-133

[b] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; and 1995 - 7,927.

[c] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[R] = Revised Data.

[E] = Estimated Data.

[RE] = Revised Estimated Data.

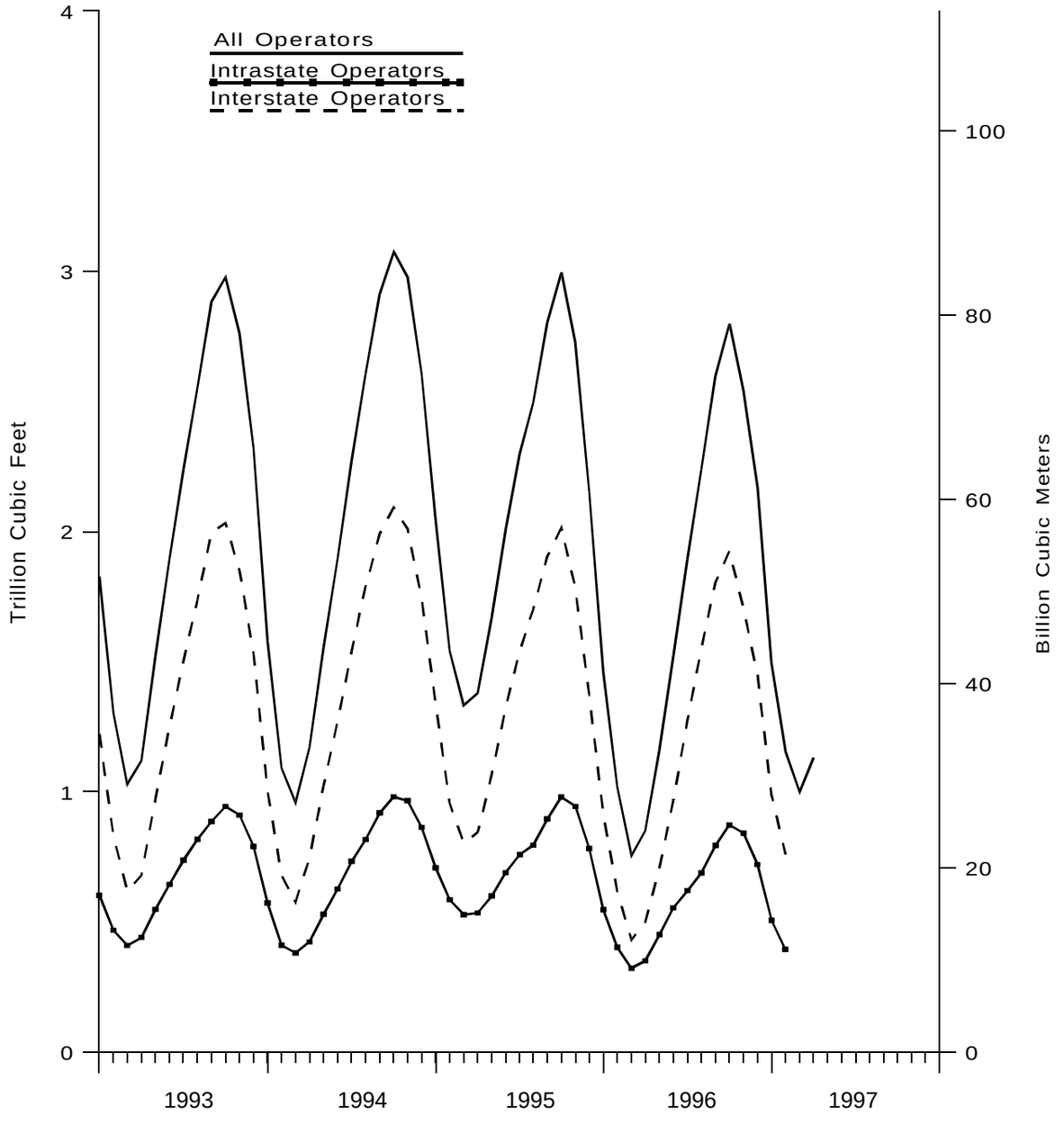
NA = Not Available.

— = Not Applicable.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Underground Natural Gas Storage in the United States, 1993-1997



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - Interstate Operators of Storage Fields, 1991-1997

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[b]	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1991 Total[a]	2,571	1,985	4,556	-218	-9.9	1,904	2,015	111
1992 Total[a]	2,652	1,819	4,471	-166	-8.4	1,838	1,940	102
1993 Total[a]	2,939	1,531	4,470	-288	-15.8	1,911	1,894	-17
1994 Total[a]	35,445	16,472	51,917	247	1.5	1,913	1,701	-213
1995								
January	2,957	1,336	4,293	330	32.8	27	449	422
February	2,958	956	3,914	276	40.6	20	404	384
March	2,955	804	3,759	228	39.6	66	225	159
April	2,954	845	3,799	97	13.0	122	78	-43
May	2,956	1,067	4,024	43	4.2	250	17	-233
June	2,962	1,324	4,287	55	4.3	292	23	-268
July	2,896	1,543	4,438	3	0.2	257	28	-229
August	2,893	1,700	4,593	-90	-5.0	208	45	-163
September	2,894	1,906	4,800	-86	-4.3	225	16	-209
October	2,891	2,016	4,907	-78	-3.7	162	48	-114
November	2,895	1,785	4,680	-226	-11.3	38	272	234
December	2,899	1,372	4,271	-371	-21.3	25	442	417
Total	—	—	—	—	—	1,692	2,048	356
1996								
January	2,897	913	3,810	-423	-31.7	23	483	460
February	2,894	617	3,511	-339	-35.5	60	359	299
March	2,855	432	3,287	-371	-46.2	44	269	225
April	2,868	500	3,368	-345	-40.8	152	73	-79
May	2,885	706	3,590	-362	-33.9	250	27	-223
June	2,893	971	3,864	-354	-26.7	286	16	-270
July	2,892	1,273	4,164	-270	-17.5	313	17	-296
August	2,889	1,551	4,440	-149	-8.8	291	14	-277
September	2,893	1,803	4,696	-103	-5.4	269	12	-257
October	2,893	1,927	4,820	-89	-4.4	170	46	-124
November	2,893	1,704	4,596	-81	-4.6	40	264	224
December	2,894	1,449	4,343	78	5.7	47	304	257
Total	—	—	—	—	—	1,946	1,884	-62
1997								
January	2,893	990	3,883	77	8.4	38	498	461
February	2,895	760	3,655	143	23.2	32	278	245

[a] Total as of December 31.

[b] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 5,512; 1992 - 5,524; 1993 - 5,367; 1994 - 5,351; and 1995 - 5,314.

— = Not Applicable.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 11. Underground Natural Gas Storage - Intrastate Operators and Independent Producers, 1991-1997

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[b]	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1991 Total[a]	1,383	839	2,221	-25	-2.9	705	674	-31
1992 Total[a]	1,392	778	2,170	-61	-7.3	717	784	67
1993 Total[a]	1,388	791	2,179	13	1.7	826	802	-24
1994 Total[a]	16,762	8,229	24,992	25	0.3	882	807	-75
1995								
January	1,409	709	2,118	136	23.7	17	195	177
February	1,410	586	1,995	175	42.6	24	160	136
March	1,407	528	1,935	146	38.2	38	102	64
April	1,406	535	1,941	111	26.1	55	49	-6
May	1,437	601	2,037	70	13.3	120	17	-103
June	1,443	690	2,133	63	10.0	119	16	-102
July	1,444	759	2,203	25	3.4	102	25	-77
August	1,446	795	2,241	-22	-2.7	85	41	-44
September	1,447	896	2,343	-24	-2.6	118	14	-104
October	1,446	980	2,427	-1	-0.1	112	20	-91
November	1,447	944	2,390	-23	-2.4	57	95	38
December	1,450	782	2,232	-82	-9.5	28	192	165
Total	—	—	—	—	—	874	926	52
1996								
January	1,451	548	1,999	-161	-22.7	24	263	239
February	1,448	403	1,851	-183	-31.2	34	183	148
March	1,429	323	1,752	-205	-38.8	33	133	99
April	1,438	351	1,788	-184	-34.4	73	39	-34
May	1,440	452	1,892	-149	-24.8	121	17	-104
June	1,441	555	1,996	-135	-19.6	122	17	-105
July	1,438	621	2,058	-138	-18.2	102	29	-73
August	1,437	689	2,126	-106	-13.3	104	36	-69
September	1,438	794	2,232	-102	-11.4	124	17	-107
October	1,436	873	2,308	-108	-11.0	102	22	-80
November	1,441	841	2,282	-103	-10.9	48	87	39
December	1,441	721	2,162	-61	-7.8	39	157	119
Total	—	—	—	—	—	926	999	73
1997								
January	1,441	507	1,948	-41	-7.5	22	234	212
February	1,441	395	1,836	-8	-1.9	17	128	111

[a] Total as of December 31.

[b] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 2,481; 1992 - 2,407; 1993 - 2,621; 1994 - 2,692.; and 1995 - 2,613.

— = Not Applicable.

Notes: Data for 1991 through 1995 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Net Withdrawals from Underground Storage, by State, 1995-1997

(Volumes in Million Cubic Feet)

State	1997		1996				
	February	January	Total	December	November	October	September
Alabama	184	531	-1,224	761	129	-117	-440
Arkansas	1,006	1,978	64	644	562	-603	-1,153
California	19,742	38,477	49,108	15,529	-3,042	-6,542	-6,976
Colorado	4,862	5,523	-414	2,998	130	-36	-3,793
Illinois	39,781	63,857	-15,745	35,297	15,621	-28,518	-36,920
Indiana	2,866	7,273	-1,644	3,270	-734	-2,706	-3,932
Iowa	8,469	15,926	-293	18,525	5,704	-10,667	-12,673
Kansas	8,745	13,031	18,232	13,179	13,662	-5,835	-8,542
Kentucky	7,810	17,627	-7,269	8,090	4,872	-2,825	-8,596
Louisiana	20,365	45,668	14,718	32,188	29,787	-13,921	-32,347
Maryland	2,662	5,873	-1,808	787	1,274	-1,580	-1,699
Michigan	70,696	119,686	-36,637	82,503	60,584	-50,388	-79,575
Minnesota	117	588	40	228	31	-33	-202
Mississippi	2,924	12,169	-12,715	4,664	5,736	-3,365	-7,335
Missouri	-252	1,126	-67	74	305	-210	-204
Montana	3,983	5,608	11,680	5,505	4,755	336	-3,519
Nebraska	504	867	-1,391	1,055	457	572	-744
New Mexico	1,527	591	5,137	-856	552	488	-1,850
New York	10,041	17,495	-13,453	8,062	6,286	-2,599	-7,346
Ohio	28,120	58,528	-10,813	34,940	25,546	-13,626	-23,686
Oklahoma	8,255	27,666	26,130	21,887	17,277	-11,668	-18,436
Oregon	1,078	1,341	1,405	1,240	552	207	-104
Pennsylvania	52,191	94,224	-58,979	25,007	33,479	-15,457	-37,736
Texas	24,285	48,252	61,749	24,219	12,159	-22,471	-34,375
Utah	2,520	8,931	12,955	9,164	4,651	1,416	-2,204
Washington	1,798	1,587	2,015	1,739	456	1,642	-599
West Virginia	28,900	53,643	-34,526	21,796	19,966	-15,212	-28,076
Wyoming	2,976	4,361	5,056	3,529	2,903	-272	-613
Total	356,154	672,425	11,311	376,021	263,660	-203,992	-363,677

See footnotes at end of table.

Table 12. Net Withdrawals from Underground Storage, by State, 1995-1997

(Volumes in Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	-395	-205	-670	-367	-153	162
Arkansas	-615	-744	-1,166	-1,302	-44	1,259
California	15,137	6,837	-9,894	-23,726	-12,087	1,292
Colorado	-3,703	-5,336	-5,026	-2,247	1,308	5,105
Illinois	-35,442	-35,741	-32,391	-27,002	-3,163	23,029
Indiana	-6,158	-4,335	-2,421	-161	990	3,541
Iowa	-13,268	-12,464	-7,692	-1,625	2,012	6,372
Kansas	-8,116	-7,168	-12,110	-7,724	-5,531	10,743
Kentucky	-10,080	-13,360	-14,232	-6,228	395	7,956
Louisiana	-32,118	-28,952	-15,803	-12,312	-1,310	24,547
Maryland	-1,869	-1,912	-2,655	-2,189	71	1,500
Michigan	-82,659	-80,378	-79,051	-58,348	-14,604	51,244
Minnesota	-210	-287	-294	-366	-88	222
Mississippi	-7,882	-8,093	-6,681	-2,478	-4,093	6,048
Missouri	-206	-240	-261	-1,319	293	379
Montana	-3,502	-3,261	-3,578	780	645	3,877
Nebraska	-1,277	-1,132	-1,826	-1,535	-287	763
New Mexico	366	812	49	32	496	2,160
New York	-12,590	-12,965	-12,170	-13,343	-2,714	9,001
Ohio	-29,401	-35,840	-36,903	-29,890	-8,654	29,036
Oklahoma	-14,723	-7,777	-11,641	-18,357	-4,610	16,897
Oregon	-437	-1,133	-1,173	-723	132	651
Pennsylvania	-52,148	-69,635	-62,217	-46,405	-22,349	43,702
Texas	-17,650	-2,753	-14,053	-28,106	-22,815	43,560
Utah	-3,884	-6,821	-6,742	-5,533	-188	2,388
Washington	-1,966	-936	-3,317	-1,974	-359	536
West Virginia	-19,867	-32,607	-29,512	-32,729	-16,154	27,054
Wyoming	-771	-2,160	-1,760	-2,704	-644	1,095
Total	-345,434	-368,585	-375,191	-327,881	-113,507	324,117

See footnotes at end of table.

Table 12. Net Withdrawals from Underground Storage, by State, 1995-1997

(Volumes in Million Cubic Feet) — Continued

State	1996		1995				
	February	January	Total	December	November	October	September
Alabama	17	54	73	400	189	73	-592
Arkansas	1,115	2,112	709	2,149	618	80	-157
California	25,281	47,300	-27,358	25,933	-1,980	-18,197	-15,258
Colorado	1,486	8,699	-3,152	5,194	-1,616	-1,296	-2,943
Illinois	41,246	68,239	22,981	51,971	18,278	-38,814	-39,267
Indiana	3,831	7,170	711	4,401	-844	-4,448	-4,766
Iowa	8,820	16,663	6,443	17,220	12,827	-7,844	-13,599
Kansas	7,491	28,184	4,875	16,419	7,352	-10,864	-16,412
Kentucky	12,252	14,488	7,178	11,394	9,279	-2,526	-6,766
Louisiana	23,515	41,445	52,753	46,245	24,216	-14,079	-23,381
Maryland	2,677	3,787	4,049	3,350	689	-1,123	-2,041
Michigan	82,900	131,134	117,409	115,938	66,298	-32,377	-52,235
Minnesota	260	781	104	245	2	-6	-241
Mississippi	3,026	7,739	7,783	6,445	9,486	-2,596	-6,289
Missouri	-100	1,423	-197	330	-165	-124	-463
Montana	3,437	6,207	3,599	5,251	3,048	554	-1,096
Nebraska	718	1,845	5,844	1,597	1,602	745	-385
New Mexico	1,575	1,312	2,273	1,527	1,120	-20	-505
New York	12,727	14,199	14,746	17,605	9,671	-1,689	-8,910
Ohio	33,716	43,949	38,862	43,090	24,176	-8,835	-18,579
Oklahoma	23,857	33,424	19,264	24,431	8,327	-13,868	-7,816
Oregon	940	1,252	-880	822	58	0	-486
Pennsylvania	64,404	80,378	63,786	78,025	45,269	-22,123	-44,608
Texas	49,234	74,801	26,165	49,476	11,542	-9,871	-22,880
Utah	8,372	12,335	-118	9,829	-1,367	-528	-1,489
Washington	762	6,031	-2,363	1,015	-67	100	-2,494
West Virginia	30,565	40,250	41,129	39,382	23,047	-14,545	-17,855
Wyoming	3,044	3,410	1,552	2,100	768	-1,125	-1,841
Total	447,168	698,611	408,220	581,782	271,826	-205,344	-313,356

See footnotes at end of table.

Table 12. Net Withdrawals from Underground Storage, by State, 1995-1997

(Volumes in Million Cubic Feet) — Continued

State	1995						
	August	July	June	May	April	March	February
Alabama	-218	-35	-42	-27	0	264	2
Arkansas	-1,390	-1,494	-1,312	-211	130	539	753
California	1,565	-13,534	-26,115	-26,521	2,818	8,053	4,882
Colorado	-4,401	-6,280	-6,269	-2,314	4,568	4,798	3,358
Illinois	-39,596	-37,156	-35,273	-34,672	5,540	28,695	68,672
Indiana	-3,727	-2,861	-1,793	-310	682	2,374	6,305
Iowa	-17,800	-12,204	-9,889	-5,203	643	5,332	12,947
Kansas	-166	-4,798	-12,637	-9,576	-1,386	10,522	11,757
Kentucky	-3,846	-6,815	-7,626	-12,777	-3,476	4,501	12,572
Louisiana	-1,207	-20,851	-27,559	-18,801	-9,723	8,326	38,571
Maryland	-1,114	332	-2,042	-2,010	415	279	4,767
Michigan	-54,249	-74,318	-65,350	-53,113	718	50,375	111,082
Minnesota	-234	-306	-262	-331	44	246	456
Mississippi	-740	-4,190	-1,631	-7,164	-4,722	4,069	6,293
Missouri	-349	11	9	-621	271	42	279
Montana	-3,206	-2,917	-2,140	-1,280	-798	689	1,994
Nebraska	-177	-278	-866	-643	200	933	998
New Mexico	1,063	-41	-1,130	-1,245	-233	-451	17
New York	-8,274	-7,285	-11,189	-8,564	-600	5,507	14,339
Ohio	-23,432	-30,964	-31,750	-28,031	5,084	19,862	37,831
Oklahoma	2,877	-7,322	-14,113	-17,831	-4,739	10,026	13,983
Oregon	0	-695	-1,034	-1,179	-867	440	385
Pennsylvania	-41,423	-35,648	-54,283	-43,325	-12,857	29,726	96,191
Texas	6,956	-3,685	-22,690	-28,366	-24,870	10,188	22,672
Utah	-3,512	-7,217	-6,043	-3,519	-1,003	3,419	3,395
Washington	271	-1,413	-1,551	-2,570	-233	253	2,230
West Virginia	-8,978	-22,284	-24,564	-24,639	-5,825	12,156	41,395
Wyoming	-1,566	-1,580	-1,447	-416	817	1,449	1,374
Total	-206,873	-305,827	-370,592	-335,260	-49,401	222,612	519,500

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data for 1995 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year.

Source: Form EIA-191, "Underground Natural Gas Storage Report."

Table 13. Activities of Underground Natural Gas Storage Operators, by State, February 1997

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	404	1,594	40	10.9	101	285
Arkansas	31,871	12,300	1,681	13,981	595	54.8	81	1,088
California	469,696	247,419	81,608	329,027	-34,749	-29.9	2,413	22,154
Colorado	99,600	47,902	19,861	67,763	-125	-0.6	486	5,348
Illinois	898,239	651,468	99,423	750,891	20,167	25.4	740	40,521
Indiana	113,120	75,878	22,300	98,178	1,258	6.0	435	3,301
Iowa	270,200	200,700	12,613	213,313	1,266	11.2	0	8,469
Kansas	285,202	180,225	37,395	217,620	-795	-2.1	4,954	13,698
Kentucky	216,351	107,097	58,543	165,640	7,541	14.8	1,585	9,394
Louisiana	554,982	268,548	66,435	334,983	-9,205	-12.2	8,849	29,214
Maryland	62,000	46,677	4,393	51,071	-264	-5.7	375	3,038
Michigan	1,056,114	420,304	236,404	656,708	56,691	31.5	373	71,068
Minnesota	7,000	4,623	1,366	5,989	297	27.8	0	117
Mississippi	134,012	77,201	29,973	107,174	8,518	39.7	4,503	7,427
Missouri	31,126	21,600	8,119	29,719	461	6.0	621	369
Montana	375,010	167,391	48,380	215,770	-12,444	-20.5	247	4,230
Nebraska	39,469	31,507	579	32,086	579	0.0	265	769
New Mexico	96,600	25,484	4,516	30,000	-426	-8.6	558	2,085
New York	173,979	103,424	29,784	133,208	10,922	57.9	808	10,849
Ohio	557,452	350,419	36,447	386,866	12,180	50.2	1,206	29,326
Oklahoma	381,087	224,497	31,113	255,610	-4,003	-11.4	3,220	11,475
Oregon	11,623	4,896	2,548	7,444	-1,632	-39.0	22	1,101
Pennsylvania	668,813	356,848	153,677	510,525	59,561	63.3	5,731	57,923
Texas	665,334	262,394	91,734	354,128	6,246	7.3	7,510	31,795
Utah	122,499	62,100	6,835	68,935	-4,260	-38.4	928	3,448
Washington	37,300	22,096	6,443	28,540	956	17.4	844	2,642
West Virginia	484,597	301,592	49,901	351,493	21,766	77.4	2,376	31,276
Wyoming	105,669	60,645	11,969	72,614	-5,912	-33.1	0	2,976
Total	7,952,224	4,336,427	1,154,443	5,490,869	135,231	13.3	49,233	405,387

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Source: Form EIA-191, "Underground Natural Gas Storage Report."

Table 14. Natural Gas Deliveries to Residential Consumers, by State, 1996-1997

(Million Cubic Feet)

State	1997	1996				
	January	Total	December	November	October	September
Alabama	9,309	56,666	6,687	3,421	1,652	1,325
Alaska	2,402	16,179	2,181	1,708	1,238	589
Arizona	6,063	28,056	4,101	2,351	1,096	911
Arkansas	8,281	46,354	6,294	3,773	1,427	1,045
California	75,096	473,940	62,990	43,757	30,502	26,139
Colorado	NA	R111,045	15,832	9,582	4,891	2,776
Connecticut	6,255	43,764	5,842	3,522	1,840	992
Delaware	1,552	9,809	1,180	628	294	183
District of Columbia	2,708	17,482	2,432	1,266	584	405
Florida	2,164	16,381	1,650	975	754	691
Georgia	21,429	126,338	18,438	14,572	5,740	3,081
Hawaii	51	537	44	41	39	41
Idaho	2,560	14,936	2,224	1,570	646	363
Illinois	99,983	537,535	80,827	63,646	28,056	13,127
Indiana	32,825	R181,822	R27,844	18,565	R8,114	3,509
Iowa	17,565	87,818	14,101	9,753	3,606	1,950
Kansas	15,778	85,074	14,383	9,474	3,058	1,994
Kentucky	13,500	71,193	10,309	9,129	3,075	1,418
Louisiana	7,844	57,043	6,217	3,537	2,118	1,900
Maine	166	971	120	105	67	28
Maryland	NA	84,936	11,460	7,382	3,643	2,244
Massachusetts	NA	113,493	13,940	10,012	5,047	2,696
Michigan	66,801	399,531	52,719	38,855	18,527	9,069
Minnesota	25,755	140,631	21,857	14,969	6,616	2,929
Mississippi	5,049	R27,973	R1,451	1,878	928	879
Missouri	25,469	137,214	20,538	11,686	4,321	2,749
Montana	3,893	22,602	3,351	2,511	1,306	648
Nebraska	9,536	R46,714	7,347	R4,079	R2,192	974
Nevada	4,470	23,156	3,935	2,069	894	732
New Hampshire	1,061	7,015	855	667	312	169
New Jersey	31,977	R209,080	26,651	16,213	8,423	4,811
New Mexico	7,451	35,932	6,025	3,925	1,415	898
New York	NA	NA	NA	NA	NA	NA
North Carolina	10,049	59,590	8,722	4,520	1,724	918
North Dakota	2,313	12,358	1,855	1,087	469	227
Ohio	66,331	375,884	52,532	38,603	18,996	7,156
Oklahoma	13,896	76,356	11,256	5,700	2,259	1,699
Oregon	5,857	33,224	5,198	3,163	1,357	820
Pennsylvania	46,015	275,013	37,266	25,929	12,899	5,623
Rhode Island	2,890	18,173	2,350	1,416	738	509
South Carolina	5,050	29,129	4,295	2,148	792	472
South Dakota	2,735	14,089	2,243	1,414	578	320
Tennessee	12,689	69,730	9,897	5,889	1,969	1,185
Texas	47,816	228,628	33,800	17,731	9,406	7,454
Utah	NA	54,344	8,203	5,749	4,215	2,540
Vermont	419	2,523	302	208	100	56
Virginia	13,154	76,818	11,007	7,430	2,895	1,422
Washington	10,885	62,652	9,780	6,191	2,923	1,568
West Virginia	5,925	37,175	5,136	3,371	1,600	692
Wisconsin	NA	147,984	21,279	16,720	7,304	3,129
Wyoming	NA	R14,755	1,901	R1,454	R1,185	R401
Total	908,787	R5,225,131	R735,320	R499,118	R241,392	R137,199

See footnotes at end of table.

Table 14. Natural Gas Deliveries to Residential Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	1,231	1,300	1,477	2,958	6,343	8,079
Alaska	544	493	647	964	1,424	1,918
Arizona	845	928	1,102	1,345	2,182	3,408
Arkansas	956	931	1,204	1,970	4,853	6,155
California	21,785	18,672	26,029	30,042	36,771	52,297
Colorado	2,508	R2,872	4,320	6,909	11,539	14,701
Connecticut	954	1,088	1,274	2,303	4,399	6,245
Delaware	177	198	313	523	1,129	1,522
District of Columbia	384	417	588	816	1,731	2,402
Florida	659	741	787	1,016	1,640	2,062
Georgia	2,956	3,166	3,103	4,251	9,817	17,770
Hawaii	40	42	45	44	49	52
Idaho	277	300	542	976	1,314	1,847
Illinois	9,539	11,341	12,429	27,148	43,168	71,301
Indiana	3,115	3,268	4,511	8,914	16,810	24,959
Iowa	1,606	1,657	2,336	4,173	6,925	11,795
Kansas	1,623	1,786	1,739	3,050	6,272	11,160
Kentucky	1,276	1,129	1,523	2,278	5,612	10,268
Louisiana	1,835	1,832	1,980	2,579	5,193	7,557
Maine	23	25	29	53	81	137
Maryland	1,979	2,054	2,631	4,077	7,237	11,845
Massachusetts	2,480	2,834	3,958	6,796	11,645	16,649
Michigan	7,303	7,660	10,627	24,651	40,297	57,657
Minnesota	2,401	2,549	3,659	7,237	12,091	18,871
Mississippi	770	815	838	1,364	3,170	3,846
Missouri	2,447	2,687	3,404	6,251	13,132	18,851
Montana	439	470	753	1,438	2,087	2,701
Nebraska	884	937	1,373	2,434	4,435	6,165
Nevada	678	779	1,011	1,264	1,884	2,903
New Hampshire	155	159	233	429	698	998
New Jersey	4,634	R5,016	5,832	10,716	20,214	30,417
New Mexico	889	1,727	1,812	654	2,763	3,300
New York	NA	10,183	14,050	25,108	41,145	59,700
North Carolina	874	901	1,226	2,160	6,272	7,490
North Dakota	209	213	399	818	1,348	1,640
Ohio	6,423	7,343	10,325	17,688	34,545	54,282
Oklahoma	1,509	1,622	1,981	3,309	7,669	10,126
Oregon	673	838	1,386	2,299	2,820	4,041
Pennsylvania	5,275	5,597	7,833	13,620	25,579	39,695
Rhode Island	450	484	692	1,216	1,831	2,664
South Carolina	415	421	542	945	2,968	3,706
South Dakota	231	239	464	803	1,367	1,865
Tennessee	1,098	1,158	1,319	2,339	7,012	9,454
Texas	6,493	7,173	7,783	9,595	19,163	28,188
Utah	1,416	1,533	1,351	2,252	4,540	5,419
Vermont	47	51	85	167	268	354
Virginia	1,432	1,510	2,100	2,550	6,609	11,307
Washington	1,270	1,624	2,626	4,463	5,445	7,639
West Virginia	534	586	812	1,642	3,855	5,463
Wisconsin	2,859	2,947	4,584	8,023	12,785	20,340
Wyoming	R289	R298	R556	R1,005	R1,409	R1,703
Total	R117,658	R124,594	R162,228	R269,627	R473,531	R704,913

See footnotes at end of table.

Table 14. Natural Gas Deliveries to Residential Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996		1995			
	February	January	Total	December	November	October
Alabama	11,261	10,931	49,570	7,563	3,902	1,542
Alaska	2,419	2,054	15,231	2,294	1,411	866
Arizona	4,274	5,511	26,893	3,154	1,554	1,027
Arkansas	8,725	9,021	41,107	7,034	3,522	1,295
California	58,085	66,870	477,495	56,731	33,646	24,743
Colorado	17,499	17,616	104,286	12,262	8,830	5,456
Connecticut	7,147	8,159	40,824	6,389	3,449	1,479
Delaware	1,941	1,721	8,505	1,231	601	230
District of Columbia	3,117	3,339	15,690	2,579	1,246	452
Florida	2,575	2,832	14,540	1,785	1,004	668
Georgia	19,247	24,195	114,670	21,351	14,965	6,067
Hawaii	51	49	574	45	43	44
Idaho	2,509	2,368	13,003	1,748	1,364	628
Illinois	81,128	95,825	500,796	81,457	64,407	26,650
Indiana	28,883	33,330	161,059	26,875	18,305	6,884
Iowa	13,686	16,229	82,238	14,248	11,222	3,803
Kansas	13,709	16,827	75,846	13,608	6,757	3,440
Kentucky	11,352	13,824	66,149	12,325	9,224	3,130
Louisiana	10,352	11,944	52,603	7,401	4,391	2,073
Maine	143	159	913	151	97	48
Maryland	14,351	16,033	76,552	12,985	7,601	2,927
Massachusetts	18,583	18,852	105,795	15,933	9,090	3,958
Michigan	63,694	68,472	380,025	61,290	39,707	17,636
Minnesota	22,363	25,091	128,736	21,117	14,915	6,969
Mississippi	5,892	6,143	26,960	4,212	2,326	631
Missouri	24,496	26,652	125,110	19,696	11,325	4,259
Montana	3,568	3,330	19,640	2,697	2,248	1,376
Nebraska	8,165	7,729	45,054	6,188	4,132	1,577
Nevada	3,264	3,744	20,686	2,357	1,349	817
New Hampshire	1,147	1,193	6,507	991	550	254
New Jersey	35,838	40,315	194,432	33,195	18,422	7,195
New Mexico	4,941	7,581	28,770	4,649	3,027	1,319
New York	61,146	68,834	375,005	56,841	32,655	13,159
North Carolina	11,875	12,907	49,379	8,581	4,445	1,402
North Dakota	2,160	1,932	11,209	1,695	1,095	424
Ohio	58,678	69,313	357,754	59,871	40,926	17,326
Oklahoma	14,443	14,782	68,702	9,769	5,029	2,526
Oregon	5,584	5,046	28,067	3,952	2,620	1,128
Pennsylvania	45,391	50,305	262,126	44,456	27,801	10,640
Rhode Island	3,119	2,704	17,342	2,634	1,336	672
South Carolina	5,887	6,539	25,164	4,422	2,262	646
South Dakota	2,221	2,343	12,610	1,828	1,332	705
Tennessee	13,711	14,700	59,994	9,171	7,624	1,801
Texas	35,810	46,031	206,415	30,741	17,917	8,860
Utah	8,571	8,555	48,975	7,214	4,684	3,857
Vermont	418	467	2,299	353	176	86
Virginia	13,807	14,750	68,712	12,753	7,059	2,245
Washington	10,136	8,988	52,763	7,611	5,683	2,444
West Virginia	6,564	6,918	35,379	5,867	3,626	1,441
Wisconsin	22,584	25,431	136,012	22,980	16,784	7,000
Wyoming	[R]2,373	[R]2,182	12,152	NA	NA	NA
Total	[R]828,884	[R]930,666	4,850,318	757,844	488,812	216,412

See footnotes at end of table.

Table 14. Natural Gas Deliveries to Residential Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1995					
	September	August	July	June	May	April
Alabama	1,279	1,299	1,401	1,565	2,206	3,692
Alaska	588	448	534	680	943	1,573
Arizona	878	859	969	1,248	1,824	2,428
Arkansas	1,042	930	997	1,243	1,881	2,973
California	22,148	21,306	25,181	28,924	38,489	43,743
Colorado	2,773	2,681	3,590	6,098	9,143	9,879
Connecticut	1,035	884	1,045	1,393	2,402	4,156
Delaware	176	177	197	264	501	865
District of Columbia	401	379	431	472	813	1,299
Florida	729	641	716	748	841	1,122
Georgia	3,319	3,000	3,002	3,206	3,961	6,026
Hawaii	45	43	47	50	49	50
Idaho	304	254	338	539	915	1,274
Illinois	13,730	9,950	11,706	12,034	20,203	42,392
Indiana	3,627	2,826	3,083	3,701	7,364	13,049
Iowa	1,814	1,252	1,380	1,334	4,303	7,377
Kansas	1,847	1,654	1,829	2,078	3,902	5,711
Kentucky	1,338	1,120	1,208	1,129	2,403	3,655
Louisiana	1,816	1,691	1,758	2,219	2,434	3,731
Maine	31	24	24	28	48	81
Maryland	2,094	1,882	1,945	2,228	3,664	6,097
Massachusetts	2,664	2,358	2,642	3,606	6,194	10,980
Michigan	9,901	7,101	7,955	10,470	21,477	36,085
Minnesota	3,271	2,395	2,584	3,405	6,033	11,393
Mississippi	476	811	841	892	1,178	1,770
Missouri	2,842	2,394	2,869	3,659	6,828	9,399
Montana	666	447	532	704	1,264	1,796
Nebraska	1,051	906	1,035	1,587	2,967	4,284
Nevada	677	655	801	1,087	1,568	2,156
New Hampshire	175	135	160	225	376	688
New Jersey	4,957	4,378	4,768	5,427	9,274	17,191
New Mexico	814	815	757	1,371	1,734	2,282
New York	9,330	7,634	10,010	13,817	23,334	38,254
North Carolina	938	799	976	1,095	1,882	3,644
North Dakota	252	183	235	390	706	1,190
Ohio	7,397	6,298	7,097	8,575	16,763	30,852
Oklahoma	1,715	1,552	1,833	2,302	4,033	5,294
Oregon	687	654	808	1,084	2,048	2,783
Pennsylvania	5,805	5,084	5,638	6,588	12,140	23,525
Rhode Island	474	448	448	711	1,195	1,834
South Carolina	475	397	472	510	746	1,584
South Dakota	307	206	271	408	782	1,255
Tennessee	1,065	1,054	1,149	1,350	2,007	3,361
Texas	7,378	6,707	7,545	8,008	9,947	14,952
Utah	1,970	1,422	1,386	1,956	2,965	4,336
Vermont	54	42	49	79	136	266
Virginia	1,383	1,459	1,494	1,626	2,830	4,876
Washington	1,411	1,251	1,361	1,926	3,088	5,064
West Virginia	740	560	574	702	1,776	3,173
Wisconsin	3,699	2,698	2,699	3,488	5,804	12,184
Wyoming	NA	271	347	681	1,006	1,200
Total	133,951	114,415	130,717	158,908	260,367	418,820

R = Revised Data.
NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 15. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1997

(Million Cubic Feet)

State	1997	1996				
	January	Total	December	November	October	September
Alabama	4,224	29,003	3,093	2,032	1,437	1,232
Alaska	3,042	24,990	2,873	2,405	2,016	1,368
Arizona	3,897	29,268	3,290	2,485	1,764	1,696
Arkansas	5,124	31,116	3,878	2,464	1,357	1,197
California	29,318	233,665	24,665	21,161	18,637	17,456
Colorado	NA	R69,252	9,071	5,821	3,431	2,224
Connecticut	5,794	39,730	4,900	3,110	2,397	1,817
Delaware	995	6,678	788	496	278	224
District of Columbia	2,314	16,219	2,322	1,190	798	768
Florida	4,104	41,667	3,972	3,162	2,942	2,827
Georgia	8,509	60,854	7,371	5,414	3,302	2,701
Hawaii	188	2,115	175	158	169	170
Idaho	1,817	11,526	1,625	1,110	598	422
Illinois	37,066	215,307	32,478	25,266	12,121	7,149
Indiana	15,648	R91,872	R13,655	9,723	4,238	2,602
Iowa	10,123	53,929	8,483	5,879	2,103	1,925
Kansas	7,193	68,067	9,333	4,839	2,000	1,696
Kentucky	7,305	41,343	5,934	4,493	2,261	1,224
Louisiana	3,755	25,831	2,298	1,726	1,405	1,327
Maine	433	2,571	310	280	172	78
Maryland	NA	47,734	6,148	4,987	2,580	1,969
Massachusetts	NA	95,286	11,764	9,749	5,415	4,783
Michigan	32,559	204,406	26,447	19,774	9,695	6,345
Minnesota	15,614	96,799	14,546	10,462	5,093	2,726
Mississippi	3,278	R22,724	R2,376	1,753	1,111	1,099
Missouri	12,562	73,164	10,251	6,170	2,979	2,251
Montana	2,554	14,943	2,189	1,725	848	499
Nebraska	5,963	R41,000	5,074	R3,713	R2,852	R2,345
Nevada	2,727	19,407	1,825	1,778	1,236	1,088
New Hampshire	1,073	6,954	873	661	344	196
New Jersey	19,973	143,212	17,168	11,152	6,829	5,325
New Mexico	4,319	27,775	3,682	2,547	1,429	1,140
New York	NA	NA	NA	NA	NA	NA
North Carolina	6,070	41,811	5,435	3,340	1,979	1,711
North Dakota	1,984	12,098	1,746	1,103	562	346
Ohio	32,664	189,648	26,180	18,193	8,717	4,129
Oklahoma	7,663	43,285	5,760	3,100	1,721	1,591
Oregon	4,014	25,553	3,589	2,310	1,303	1,021
Pennsylvania	22,550	155,253	21,487	14,218	7,701	4,297
Rhode Island	1,695	11,734	1,286	969	643	574
South Carolina	2,776	20,652	2,414	1,631	1,150	1,033
South Dakota	2,046	11,604	1,813	1,238	571	353
Tennessee	9,020	56,806	6,505	4,976	2,853	2,420
Texas	NA	NA	21,396	17,363	NA	13,418
Utah	NA	29,544	4,228	3,191	2,077	1,282
Vermont	477	2,850	351	279	164	91
Virginia	8,636	58,649	7,512	5,771	3,373	2,464
Washington	7,492	48,167	6,633	4,495	2,705	1,923
West Virginia	3,874	29,288	3,500	2,611	1,715	1,250
Wisconsin	NA	94,566	13,530	11,157	4,538	2,556
Wyoming	NA	R17,081	3,889	R2,457	R1,395	R351
Total	486,661	R3,208,521	R412,995	R297,609	R175,448	R130,462

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	1,158	1,192	1,252	1,722	2,866	3,714
Alaska	1,177	1,125	1,247	1,558	2,084	2,778
Arizona	1,769	1,796	2,014	2,129	2,555	3,012
Arkansas	1,061	1,057	1,053	1,520	2,966	3,897
California	17,453	17,060	15,671	16,245	17,216	21,546
Colorado	2,141	R2,393	3,057	4,431	6,997	8,908
Connecticut	1,711	1,967	1,745	2,247	3,528	4,844
Delaware	204	203	246	366	694	889
District of Columbia	746	800	824	1,233	1,893	1,537
Florida	2,703	2,822	3,015	3,321	3,899	4,142
Georgia	2,613	2,730	2,499	3,274	5,371	7,474
Hawaii	165	174	175	171	189	182
Idaho	355	347	479	711	996	1,363
Illinois	5,332	5,446	5,713	9,682	17,310	26,484
Indiana	2,440	2,307	2,789	4,497	7,988	11,920
Iowa	1,077	1,212	1,629	2,572	4,548	7,047
Kansas	4,622	2,520	2,351	4,060	6,275	8,795
Kentucky	1,150	1,059	1,080	1,544	3,341	5,578
Louisiana	1,332	1,277	1,511	1,682	2,401	3,039
Maine	75	74	82	137	208	356
Maryland	1,823	1,728	1,843	2,529	3,912	5,753
Massachusetts	4,272	3,744	4,200	6,048	8,952	11,127
Michigan	5,574	5,858	6,541	12,480	19,934	28,197
Minnesota	2,283	2,346	3,024	5,314	8,731	12,796
Mississippi	1,221	1,179	1,091	1,280	2,024	2,607
Missouri	2,375	2,307	2,395	3,583	6,656	9,543
Montana	375	386	508	861	1,330	1,761
Nebraska	R2,556	R3,631	R1,499	R1,958	R3,223	R4,055
Nevada	1,036	1,099	1,257	1,420	1,769	2,219
New Hampshire	186	172	237	399	654	963
New Jersey	5,490	5,454	5,697	8,016	14,342	17,802
New Mexico	1,457	1,514	1,721	1,549	2,569	2,617
New York	NA	NA	NA	NA	NA	NA
North Carolina	1,625	1,458	1,635	2,031	3,871	4,994
North Dakota	307	294	528	747	1,256	1,499
Ohio	4,490	4,662	7,635	8,922	16,758	26,529
Oklahoma	1,509	1,626	1,663	2,043	4,102	5,228
Oregon	904	966	1,302	1,781	2,056	2,895
Pennsylvania	5,633	4,271	5,389	7,903	13,699	20,751
Rhode Island	442	419	445	757	996	1,605
South Carolina	950	927	1,270	1,424	1,858	2,160
South Dakota	283	288	386	619	1,059	1,487
Tennessee	1,990	1,964	2,165	2,690	5,241	7,173
Texas	NA	15,399	15,909	18,409	21,434	26,607
Utah	876	906	894	1,354	2,475	3,124
Vermont	69	68	98	155	282	384
Virginia	2,085	2,571	2,998	3,407	5,062	7,205
Washington	1,696	1,859	2,669	3,430	4,143	5,445
West Virginia	1,331	1,393	1,141	1,596	2,573	3,522
Wisconsin	2,363	2,016	3,092	5,100	7,921	12,341
Wyoming	R279	R271	R504	R1,348	R1,724	R1,465
Total	R128,199	R127,386	R138,361	R187,389	R287,535	R393,402

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996		1995			
	February	January	Total	December	November	October
Alabama	4,775	4,529	26,232	3,502	2,177	1,323
Alaska	3,264	3,096	24,979	3,190	2,461	1,846
Arizona	3,136	3,620	28,329	2,802	2,056	1,702
Arkansas	5,251	5,414	27,411	4,311	2,265	1,183
California	23,078	23,477	279,606	26,152	22,818	21,272
Colorado	10,393	10,385	66,657	7,282	5,703	3,787
Connecticut	5,472	5,992	37,890	4,491	2,808	1,850
Delaware	1,186	1,104	5,743	851	417	209
District of Columbia	1,952	2,156	17,045	2,194	1,116	794
Florida	4,248	4,613	40,459	3,883	3,171	2,840
Georgia	8,401	9,702	56,538	8,062	5,706	3,379
Hawaii	190	198	2,199	177	178	179
Idaho	1,785	1,735	10,380	1,300	997	591
Illinois	32,431	35,894	203,833	30,734	22,408	11,880
Indiana	13,850	15,863	82,825	13,009	9,142	4,181
Iowa	8,289	9,164	50,329	8,170	5,952	3,021
Kansas	10,003	11,575	53,124	9,850	4,066	2,903
Kentucky	6,364	7,315	38,613	6,426	4,746	1,892
Louisiana	3,876	3,956	23,854	2,613	1,823	1,410
Maine	386	413	2,426	389	254	129
Maryland	6,627	7,835	46,924	7,538	4,871	1,907
Massachusetts	12,640	12,591	82,282	11,594	7,597	4,026
Michigan	30,779	32,781	194,105	29,922	19,742	9,647
Minnesota	13,776	15,703	90,684	13,839	10,937	5,456
Mississippi	3,404	3,581	20,171	2,627	1,693	1,013
Missouri	11,719	12,936	65,092	9,698	5,747	2,756
Montana	2,276	2,185	13,497	1,898	1,454	899
Nebraska	[R]4,681	[R]5,413	40,044	NA	NA	NA
Nevada	2,262	2,418	18,812	1,871	1,444	1,151
New Hampshire	1,118	1,151	6,515	989	620	285
New Jersey	22,520	23,419	138,971	20,914	10,830	6,263
New Mexico	3,427	4,123	24,007	2,920	2,149	1,330
New York	NA	NA	231,479	30,309	22,325	13,394
North Carolina	6,615	7,117	37,371	5,279	3,263	1,740
North Dakota	1,861	1,850	11,656	1,723	1,209	549
Ohio	29,596	33,837	175,347	27,649	18,650	7,916
Oklahoma	7,469	7,474	39,756	5,164	3,020	1,836
Oregon	3,900	3,526	22,437	2,837	2,010	1,166
Pennsylvania	23,598	26,306	143,744	22,596	19,918	6,583
Rhode Island	1,917	1,682	12,066	1,523	1,216	580
South Carolina	2,743	3,092	18,869	2,414	1,674	1,054
South Dakota	1,685	1,821	10,689	1,452	1,118	665
Tennessee	9,108	9,722	51,238	7,681	4,908	2,582
Texas	20,625	26,789	209,613	22,432	16,279	13,673
Utah	4,596	4,541	26,925	3,724	2,605	1,905
Vermont	449	462	2,672	410	242	130
Virginia	7,874	8,327	56,991	8,287	5,766	2,687
Washington	6,843	6,326	42,675	5,274	4,052	2,304
West Virginia	4,103	4,551	25,879	3,533	2,739	1,557
Wisconsin	13,930	16,022	84,920	13,817	10,676	4,968
Wyoming	[R]1,714	[R]1,685	9,849	NA	NA	NA
Total	[R]445,138	[R]484,598	3,033,751	419,620	296,702	170,849

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1995					
	September	August	July	June	May	April
Alabama	1,139	1,110	1,149	1,242	1,454	1,963
Alaska	1,366	1,301	1,325	1,489	1,603	2,362
Arizona	1,652	1,817	1,840	2,014	2,251	2,556
Arkansas	1,060	1,021	1,015	1,156	1,337	2,027
California	19,391	18,362	21,954	19,028	24,831	23,976
Colorado	2,210	2,314	2,634	4,061	5,776	6,413
Connecticut	1,762	1,869	1,679	1,917	2,629	3,524
Delaware	205	168	182	223	341	527
District of Columbia	766	744	820	884	1,158	1,607
Florida	2,818	2,751	2,970	2,930	3,055	3,433
Georgia	2,450	2,781	2,519	2,615	2,918	3,739
Hawaii	179	178	186	188	185	183
Idaho	392	346	361	487	708	951
Illinois	6,984	6,612	6,035	6,157	9,135	15,643
Indiana	2,645	2,328	2,230	2,442	4,048	6,546
Iowa	1,701	1,150	1,310	1,484	2,321	4,189
Kansas	2,921	3,564	2,294	1,843	2,912	3,756
Kentucky	1,247	1,099	1,130	1,060	1,687	2,090
Louisiana	1,327	1,307	1,215	1,555	1,576	1,840
Maine	86	71	70	77	128	211
Maryland	2,065	1,722	1,612	1,994	2,388	3,736
Massachusetts	3,525	3,344	3,386	3,930	5,319	7,717
Michigan	6,417	5,778	5,664	6,372	11,004	18,384
Minnesota	2,864	2,156	2,212	2,618	4,303	7,759
Mississippi	1,023	1,202	902	1,074	1,070	1,295
Missouri	2,119	2,019	2,050	2,326	3,512	4,806
Montana	520	376	404	488	872	1,245
Nebraska	NA	2,997	2,436	1,003	1,320	1,742
Nevada	1,009	978	1,082	1,268	1,558	1,784
New Hampshire	197	166	188	227	369	632
New Jersey	5,734	5,307	5,615	5,624	8,377	12,498
New Mexico	1,193	1,119	1,073	1,408	2,105	2,006
New York	10,619	10,797	11,281	11,501	14,459	20,813
North Carolina	1,597	1,475	1,487	1,579	1,766	3,065
North Dakota	333	324	341	408	673	1,145
Ohio	4,623	4,406	4,697	4,979	8,132	14,128
Oklahoma	1,903	1,524	1,558	1,794	2,354	2,968
Oregon	979	879	959	1,160	1,579	2,064
Pennsylvania	4,210	3,935	3,929	4,435	7,223	11,960
Rhode Island	294	582	413	562	901	1,353
South Carolina	1,044	956	950	1,013	1,045	1,382
South Dakota	357	263	311	400	645	1,049
Tennessee	2,002	2,079	1,917	2,023	2,348	3,131
Texas	11,336	16,588	16,809	12,301	16,425	18,230
Utah	1,088	899	861	1,122	1,675	2,429
Vermont	95	72	70	89	140	277
Virginia	2,147	2,473	2,341	2,533	3,329	4,532
Washington	1,862	1,654	1,750	2,179	2,857	3,915
West Virginia	1,150	1,056	998	1,055	1,392	2,021
Wisconsin	2,943	2,214	1,916	1,833	4,250	7,173
Wyoming	NA	258	373	594	873	987
Total	129,530	130,493	132,500	132,746	184,318	253,763

R = Revised Data.
NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Deliveries for total year 1995 may not equal the sum of the twelve months. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1997

(Million Cubic Feet)

State	1997	1996				
	January	Total	December	November	October	September
Alabama	17,842	205,175	17,247	17,651	18,646	17,183
Alaska	7,090	75,616	7,034	6,450	6,421	6,288
Arizona	2,041	25,726	2,555	2,304	2,361	2,279
Arkansas	12,974	122,324	11,396	12,010	12,470	7,896
California	55,512	681,527	63,374	61,298	59,429	59,349
Colorado	NA	R84,273	7,618	7,290	6,037	6,107
Connecticut	3,088	32,706	2,989	3,337	3,060	2,548
Delaware	1,279	14,268	1,213	1,218	1,338	1,138
District of Columbia	0	0	0	0	0	0
Florida	12,562	137,351	11,512	12,071	11,303	11,770
Georgia	14,779	179,015	15,597	15,990	15,321	14,813
Hawaii	0	0	0	0	0	0
Idaho [a]	3,166	34,573	2,890	2,747	3,023	2,802
Illinois	34,978	334,839	37,247	32,295	25,278	20,140
Indiana	29,314	R290,093	R24,424	25,343	24,136	20,413
Iowa	10,742	113,032	10,739	11,266	9,530	7,552
Kansas	11,864	130,980	9,681	11,581	8,438	9,960
Kentucky	10,309	94,470	9,695	8,841	7,704	6,743
Louisiana	83,386	NA	90,905	NA	NA	92,337
Maine	180	2,036	171	234	239	165
Maryland	NA	52,665	5,002	6,097	4,261	4,121
Massachusetts	NA	98,759	9,345	8,613	9,307	8,116
Michigan	33,333	353,173	32,225	30,623	25,882	25,020
Minnesota	9,385	107,819	10,004	10,609	9,041	7,792
Mississippi	7,602	R82,199	R6,764	6,812	7,271	6,642
Missouri	7,259	69,929	6,394	6,018	4,833	4,469
Montana	1,913	17,362	1,850	1,545	1,502	1,335
Nebraska	3,033	28,994	3,063	2,596	2,612	1,857
Nevada	2,675	32,435	2,843	2,691	2,532	2,714
New Hampshire	411	4,623	391	527	430	354
New Jersey	17,283	R190,431	15,630	14,900	14,057	14,258
New Mexico	2,335	20,464	1,995	1,699	1,622	1,570
New York	NA	268,329	24,948	24,861	21,118	20,727
North Carolina	9,160	106,381	8,860	10,882	10,781	9,211
North Dakota	930	7,565	1,018	1,030	760	561
Ohio	34,892	349,369	32,711	31,586	28,023	23,475
Oklahoma	18,887	202,255	19,290	16,009	16,798	16,821
Oregon	8,402	88,842	8,500	8,527	8,658	7,933
Pennsylvania	23,292	258,435	20,775	22,305	18,980	17,633
Rhode Island	2,131	26,985	2,166	2,355	2,501	2,296
South Carolina	8,080	93,933	8,462	8,603	8,800	7,925
South Dakota	877	8,148	819	798	557	443
Tennessee	11,832	128,418	12,872	13,066	11,146	10,558
Texas	192,066	2,071,780	166,935	159,473	167,443	170,430
Utah	NA	42,335	3,705	3,674	3,603	3,445
Vermont	181	1,926	189	208	172	149
Virginia	8,425	84,864	9,500	7,510	6,510	5,368
Washington	9,112	114,620	9,782	10,903	10,712	10,209
West Virginia	4,501	51,432	4,572	4,541	4,418	4,781
Wisconsin	NA	149,696	15,515	14,706	11,628	9,591
Wyoming	NA	R43,925	4,057	R4,214	R4,156	R3,205
Total	804,308	R8,784,183	R776,471	R765,959	R727,147	R692,491

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	16,496	16,794	15,727	16,863	17,310	17,354
Alaska	6,961	6,577	6,268	5,808	6,123	6,764
Arizona	2,172	2,220	2,180	1,453	2,042	2,112
Arkansas	8,990	7,390	7,565	7,760	9,395	12,224
California	64,670	60,431	53,941	53,833	52,449	49,361
Colorado	6,630	[R]5,807	6,309	6,597	8,185	7,182
Connecticut	2,781	2,286	2,457	2,467	2,809	3,036
Delaware	1,117	1,122	1,303	1,207	1,046	1,314
District of Columbia	0	0	0	0	0	0
Florida	11,552	11,552	10,988	12,826	11,552	11,679
Georgia	15,983	14,011	14,632	15,449	15,477	15,227
Hawaii	0	0	0	0	0	0
Idaho [a]	2,408	2,697	2,698	2,850	2,856	3,206
Illinois	21,041	19,178	21,336	25,635	27,988	32,566
Indiana	19,676	20,037	42,147	9,883	22,984	26,207
Iowa	8,875	8,305	8,419	7,462	9,701	10,401
Kansas	11,693	11,254	11,669	9,541	10,308	10,938
Kentucky	6,430	6,045	8,704	6,403	7,246	8,414
Louisiana	89,426	87,374	90,176	87,567	91,694	88,725
Maine	156	128	167	148	134	159
Maryland	4,402	4,262	3,970	4,064	4,983	4,673
Massachusetts	8,889	7,274	7,212	7,165	8,260	8,835
Michigan	24,539	24,946	26,087	28,405	30,792	35,200
Minnesota	7,566	7,989	8,586	8,510	9,983	10,346
Mississippi	6,532	6,839	6,590	6,733	7,012	7,373
Missouri	5,765	4,070	4,644	5,311	6,382	6,973
Montana	1,380	1,224	1,174	1,286	1,311	1,435
Nebraska	1,928	1,976	1,922	2,114	2,576	2,857
Nevada	2,773	2,847	2,710	2,858	2,524	2,649
New Hampshire	352	324	344	424	400	390
New Jersey	15,593	[R]16,756	15,540	16,175	17,426	15,442
New Mexico	1,563	1,600	1,632	1,420	1,749	1,609
New York	22,197	21,237	21,379	19,349	22,857	19,921
North Carolina	8,952	8,169	8,361	9,110	8,777	9,025
North Dakota	409	434	353	605	608	630
Ohio	23,938	22,619	29,133	26,206	28,680	31,069
Oklahoma	17,167	16,923	14,670	15,962	15,052	17,717
Oregon	7,887	7,327	6,795	7,792	5,970	6,376
Pennsylvania	19,207	17,214	18,560	19,897	21,123	23,168
Rhode Island	2,362	1,914	2,114	2,210	2,087	1,833
South Carolina	7,991	7,710	7,826	8,236	8,275	7,668
South Dakota	496	489	478	509	550	1,684
Tennessee	10,115	9,710	9,995	9,460	9,591	9,912
Texas	174,691	165,822	170,788	179,149	178,591	183,201
Utah	3,382	3,261	3,171	3,374	3,435	3,636
Vermont	153	106	152	175	133	223
Virginia	7,286	7,089	4,478	6,649	5,953	9,957
Washington	9,965	8,949	7,684	8,630	8,821	9,105
West Virginia	4,033	4,033	3,815	4,020	4,070	4,458
Wisconsin	9,206	8,540	9,186	10,790	13,184	15,050
Wyoming	[R]3,337	[R]3,112	[R]3,545	[R]3,462	[R]3,610	[R]3,464
Total	[R]711,112	[R]677,974	[R]709,580	[R]693,800	[R]734,064	[R]762,741

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996		1995			
	February	January	Total	December	November	October
Alabama	16,957	16,946	204,060	17,790	17,076	16,919
Alaska	6,115	4,807	64,977	4,714	3,999	4,128
Arizona	1,897	2,152	27,663	2,296	2,248	2,248
Arkansas	12,109	13,120	138,803	11,998	12,094	12,026
California	51,616	51,774	687,921	56,444	54,388	62,097
Colorado	9,397	7,112	72,439	5,739	5,243	3,766
Connecticut	2,777	2,159	33,106	3,028	3,158	2,538
Delaware	1,082	1,170	19,399	1,287	1,669	1,683
District of Columbia	0	0	0	0	0	0
Florida	10,963	9,584	133,477	15,661	10,973	10,332
Georgia	12,024	14,490	183,692	16,401	16,694	17,455
Hawaii	0	0	0	0	0	0
Idaho [a]	3,062	3,335	34,024	3,129	2,943	3,109
Illinois	33,454	38,681	321,465	35,704	32,284	25,162
Indiana	25,615	29,228	275,487	26,872	24,695	21,086
Iowa	9,701	11,082	115,080	12,216	9,887	10,106
Kansas	11,844	14,074	129,515	12,193	10,508	9,357
Kentucky	8,194	10,051	90,764	8,834	8,071	7,545
Louisiana	82,114	79,416	1,044,136	85,024	83,880	87,298
Maine	164	171	1,993	169	242	199
Maryland	3,251	3,579	48,963	3,106	3,881	4,694
Massachusetts	6,963	8,780	107,730	9,656	9,132	7,483
Michigan	35,214	34,241	326,551	32,701	27,912	24,493
Minnesota	7,846	9,548	106,189	10,889	9,114	8,724
Mississippi	7,151	6,481	84,526	7,352	7,334	6,649
Missouri	7,163	7,906	68,924	7,185	6,164	5,389
Montana	1,512	1,807	18,135	1,821	1,753	1,645
Nebraska	2,666	2,828	44,767	3,141	4,125	3,084
Nevada	2,545	2,750	30,641	2,702	2,612	2,371
New Hampshire	330	357	4,607	348	450	416
New Jersey	16,487	18,169	209,014	19,886	18,318	14,764
New Mexico	1,960	2,044	21,095	2,469	2,100	989
New York	22,936	26,799	278,576	26,167	24,647	22,686
North Carolina	6,955	7,299	106,731	8,684	9,303	9,306
North Dakota	577	581	6,505	627	600	549
Ohio	33,410	38,520	336,552	35,635	30,953	26,516
Oklahoma	16,794	19,054	194,101	15,082	16,493	16,186
Oregon	6,164	6,913	68,904	6,418	5,836	6,158
Pennsylvania	22,258	37,314	249,928	22,158	24,198	19,361
Rhode Island	1,647	3,499	35,109	4,305	3,048	1,846
South Carolina	6,330	6,107	98,332	6,928	8,251	8,301
South Dakota	698	629	6,933	702	730	542
Tennessee	10,208	11,785	125,814	11,360	10,937	10,358
Texas	176,101	179,155	1,923,763	179,078	163,975	168,086
Utah	3,721	3,928	42,373	3,805	3,378	3,396
Vermont	148	119	2,159	254	221	181
Virginia	7,239	7,326	97,499	9,819	7,113	7,333
Washington	9,810	10,049	109,997	9,389	9,594	10,139
West Virginia	4,176	4,516	52,239	4,576	4,834	4,576
Wisconsin	15,019	17,283	146,070	15,931	14,483	11,474
Wyoming	[R]4,317	[R]3,446	48,856	NA	NA	NA
Total	[R]740,678	[R]792,166	8,579,585	786,266	736,229	709,183

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1995					
	September	August	July	June	May	April
Alabama	16,065	17,446	17,003	16,661	16,508	16,252
Alaska	6,889	10,375	6,994	7,688	3,660	4,121
Arizona	2,131	2,127	1,989	2,202	2,454	2,513
Arkansas	10,697	11,524	10,995	10,731	11,307	10,842
California	59,153	59,907	58,181	57,915	59,543	60,714
Colorado	6,262	5,931	5,530	6,613	6,365	6,496
Connecticut	2,179	2,220	2,700	2,267	2,518	3,036
Delaware	1,619	1,656	1,483	1,741	2,099	1,815
District of Columbia	0	0	0	0	0	0
Florida	9,602	10,242	10,470	9,977	11,178	11,206
Georgia	12,994	14,253	14,123	14,480	15,202	16,709
Hawaii	0	0	0	0	0	0
Idaho [a]	2,468	2,291	2,348	2,822	2,796	2,834
Illinois	21,899	21,509	19,734	21,215	23,683	25,306
Indiana	19,205	19,212	18,141	18,794	20,837	22,824
Iowa	8,625	8,816	8,405	8,633	9,160	9,482
Kansas	10,203	13,141	10,958	8,352	11,659	10,255
Kentucky	6,461	6,285	5,886	6,462	6,960	7,461
Louisiana	85,727	87,079	88,168	83,825	93,065	88,016
Maine	155	161	136	155	171	182
Maryland	3,377	4,443	4,243	4,080	4,623	4,363
Massachusetts	7,740	8,532	8,616	9,484	7,703	9,280
Michigan	22,997	23,632	22,010	24,185	26,055	29,765
Minnesota	7,894	8,426	8,111	7,492	7,814	8,668
Mississippi	5,840	6,856	6,644	6,748	7,283	6,652
Missouri	4,862	4,719	4,256	4,474	4,997	5,429
Montana	1,315	1,331	1,307	1,307	1,509	1,579
Nebraska	4,337	3,915	4,526	3,269	3,553	3,626
Nevada	2,643	2,692	2,613	2,553	2,761	2,292
New Hampshire	350	353	364	367	411	506
New Jersey	15,953	16,057	15,519	15,346	16,166	18,107
New Mexico	1,716	1,999	1,403	1,334	1,337	1,548
New York	19,886	22,529	22,633	20,332	20,568	23,355
North Carolina	8,824	9,087	8,117	9,007	8,652	8,488
North Dakota	411	391	470	475	528	558
Ohio	23,938	23,159	21,212	22,325	24,718	27,547
Oklahoma	15,262	17,580	14,072	16,299	15,407	14,639
Oregon	5,246	5,941	5,371	5,236	5,617	5,543
Pennsylvania	17,922	18,075	17,785	18,127	18,912	21,463
Rhode Island	2,563	2,944	2,890	2,720	3,240	3,295
South Carolina	8,081	8,460	7,481	9,212	8,912	8,664
South Dakota	474	531	499	553	567	581
Tennessee	10,680	9,378	9,050	10,275	8,269	11,944
Texas	156,909	147,607	168,106	152,278	174,700	161,166
Utah	3,116	2,995	2,891	2,997	3,450	3,500
Vermont	115	150	151	157	172	193
Virginia	8,569	11,546	10,330	7,703	7,767	7,015
Washington	9,314	9,447	7,674	7,590	7,812	9,408
West Virginia	4,043	4,111	3,753	3,920	4,306	4,207
Wisconsin	9,663	9,313	8,377	8,810	10,329	12,596
Wyoming	NA	3,738	3,452	3,967	3,914	4,166
Total	670,153	684,111	677,167	663,154	711,216	720,208

[a] Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components. Deliveries for total year 1995 in Idaho do not equal the sum of the twelve months.

R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1997

(Million Cubic Feet)

State	1997	1996				
	January	Total	December	November	October	September
Alabama	125	R6,146	291	480	384	593
Alaska	3,220	R31,767	3,078	2,683	2,637	2,449
Arizona	319	R19,248	443	296	2,242	2,145
Arkansas	626	R33,988	1,226	297	201	4,215
California	17,524	R318,035	17,182	22,900	32,454	R35,564
Colorado	398	R5,511	454	319	R506	R724
Connecticut	192	R10,456	131	912	1,643	2,168
Delaware	1,746	R23,370	1,048	2,129	2,330	2,562
District of Columbia	0	0	0	0	0	0
Florida	10,485	R283,557	13,124	17,908	28,677	R33,595
Georgia	42	R4,674	43	80	9	243
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	1,201	R25,863	550	1,859	1,046	2,309
Indiana	147	R4,330	236	256	144	197
Iowa	261	R3,491	236	232	R211	277
Kansas	547	R22,607	672	578	808	1,959
Kentucky	111	1,836	82	104	65	83
Louisiana	14,747	R252,139	12,921	14,958	18,877	R21,484
Maine	0	0	0	0	0	0
Maryland	185	R8,455	211	263	485	1,521
Massachusetts	1,570	R45,037	1,562	3,081	8,648	R9,009
Michigan	1,916	R32,559	2,888	3,151	2,705	3,320
Minnesota	658	R5,301	419	403	469	602
Mississippi	3,207	R83,251	3,671	6,561	5,392	9,812
Missouri	86	R5,223	69	238	R193	R287
Montana	64	470	72	85	42	35
Nebraska	31	R2,351	82	94	122	161
Nevada	1,468	R46,766	2,311	2,458	4,266	4,900
New Hampshire	0	3	0	1	0	0
New Jersey	746	R25,825	445	1,038	1,481	R3,575
New Mexico	2,059	R29,969	2,244	2,423	R2,787	R2,492
New York	4,823	R142,688	5,108	10,715	14,459	21,421
North Carolina	0	R2,381	1	1	112	75
North Dakota	0	3	0	0	0	1
Ohio	124	R2,867	106	259	56	257
Oklahoma	6,260	R136,436	6,107	8,068	9,395	13,201
Oregon	295	14,015	334	1,289	3,049	3,801
Pennsylvania	281	R7,239	282	654	650	R1,150
Rhode Island	2,088	R25,071	2,167	2,449	2,424	2,236
South Carolina	11	1,206	20	16	23	350
South Dakota	26	725	35	80	5	76
Tennessee	0	572	0	1	0	79
Texas	59,992	R1,039,155	51,332	R59,062	75,410	R90,570
Utah	138	R3,428	142	130	133	554
Vermont	2	24	3	3	3	3
Virginia	178	R10,275	333	193	473	1,677
Washington	6	6,590	21	358	801	2,251
West Virginia	12	205	43	3	1	26
Wisconsin	1,174	R7,303	702	803	572	739
Wyoming	9	R87	R6	R6	R7	R8
Total	139,104	R2,732,496	R132,434	R169,879	R226,394	R284,758

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	708	1,457	[R]931	[R]840	112	134
Alaska	2,595	2,514	[R]2,611	[R]2,592	2,434	2,763
Arizona	4,797	3,286	[R]1,940	[R]1,047	828	649
Arkansas	5,421	7,029	[R]5,722	[R]4,342	3,663	1,181
California	[R]53,941	42,047	[R]23,684	[R]18,648	18,202	13,728
Colorado	[R]798	[R]665	[R]400	[R]584	246	317
Connecticut	2,269	1,409	[R]951	[R]595	298	28
Delaware	2,416	2,342	[R]2,724	[R]1,189	1,291	1,742
District of Columbia	0	0	0	0	0	0
Florida	33,376	29,468	[R]28,311	[R]31,435	21,801	[R]15,773
Georgia	588	1,514	[R]1,010	[R]1,000	61	98
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	4,289	4,369	[R]4,205	[R]2,562	2,103	856
Indiana	570	483	746	[R]506	248	233
Iowa	298	355	[R]545	[R]435	289	274
Kansas	4,148	4,884	[R]4,175	[R]1,661	728	726
Kentucky	281	249	[R]235	[R]236	139	119
Louisiana	32,455	35,959	[R]31,317	[R]26,523	13,556	15,080
Maine	0	0	0	0	0	0
Maryland	1,920	1,273	[R]1,278	[R]980	220	126
Massachusetts	[R]7,190	[R]3,508	[R]3,616	[R]2,443	2,108	1,485
Michigan	2,746	2,767	[R]3,062	[R]2,613	2,011	2,100
Minnesota	624	690	699	273	342	351
Mississippi	12,074	10,509	[R]11,998	[R]8,484	4,734	3,311
Missouri	896	1,152	[R]1,011	[R]802	184	111
Montana	23	45	52	8	4	37
Nebraska	213	348	466	[R]320	202	139
Nevada	6,394	6,552	[R]4,802	[R]4,271	2,737	2,474
New Hampshire	0	0	0	0	0	0
New Jersey	4,064	4,441	[R]4,207	[R]1,984	647	483
New Mexico	[R]3,456	[R]3,480	[R]2,895	[R]3,067	1,997	2,383
New York	24,086	18,789	[R]16,773	[R]13,132	5,595	5,703
North Carolina	196	766	[R]802	[R]377	3	3
North Dakota	1	0	1	0	0	0
Ohio	593	312	477	[R]426	46	58
Oklahoma	[R]19,557	[R]19,747	[R]17,701	[R]12,313	7,340	7,490
Oregon	3,202	2,339	0	0	0	0
Pennsylvania	1,778	676	[R]591	[R]506	262	225
Rhode Island	2,417	2,031	[R]2,045	[R]2,011	1,700	2,395
South Carolina	64	239	[R]278	[R]188	9	9
South Dakota	178	155	174	2	3	6
Tennessee	240	130	78	15	0	29
Texas	[R]119,967	[R]136,109	[R]114,370	[R]114,229	[R]72,920	72,619
Utah	870	810	[R]227	8	128	137
Vermont	2	3	4	0	2	0
Virginia	1,578	1,704	[R]1,532	[R]860	107	[R]314
Washington	2,558	451	0	1	0	57
West Virginia	15	11	21	9	16	13
Wisconsin	1,198	532	[R]772	[R]696	229	353
Wyoming	[R]9	[R]4	[R]17	[R]5	[R]5	[R]8
Total	[R]367,059	[R]357,604	[R]299,454	[R]264,216	[R]169,550	[R]156,120

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996		1995			
	February	January	Total	December	November	October
Alabama	125	92	7,377	107	226	260
Alaska	2,573	2,839	29,809	2,528	2,436	2,350
Arizona	550	1,025	18,846	510	502	375
Arkansas	433	258	32,750	813	622	2,059
California	15,742	R23,942	394,698	23,944	30,266	34,916
Colorado	305	193	3,798	259	230	341
Connecticut	27	26	19,310	44	928	1,000
Delaware	939	2,657	27,010	1,964	2,478	2,356
District of Columbia	0	0	0	0	0	0
Florida	13,992	16,097	318,854	17,056	25,857	30,486
Georgia	15	13	7,834	17	63	184
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	421	1,296	39,143	2,782	3,216	1,456
Indiana	337	373	8,349	671	623	246
Iowa	162	176	3,614	145	129	215
Kansas	701	1,568	27,945	1,090	1,050	629
Kentucky	56	186	866	170	124	30
Louisiana	14,146	14,863	322,923	16,716	21,614	26,302
Maine	0	0	0	0	0	0
Maryland	69	109	18,833	140	435	632
Massachusetts	1,435	952	64,623	1,732	3,431	5,658
Michigan	2,214	2,981	35,784	3,540	3,217	2,521
Minnesota	200	229	8,292	255	456	562
Mississippi	2,838	3,868	111,229	6,426	5,181	6,374
Missouri	134	146	12,830	234	500	416
Montana	23	43	388	27	32	16
Nebraska	80	123	3,059	265	269	246
Nevada	2,488	3,113	40,134	2,686	2,463	3,138
New Hampshire	0	0	2,248	0	9	2
New Jersey	1,291	2,171	45,897	2,199	2,576	2,133
New Mexico	861	1,883	31,924	1,842	2,025	1,917
New York	3,392	3,514	246,265	8,774	16,690	19,517
North Carolina	9	35	3,146	66	114	194
North Dakota	0	0	1	0	0	0
Ohio	90	187	7,459	315	402	179
Oklahoma	6,910	8,610	154,114	9,251	7,826	8,438
Oregon	0	0	19,136	455	1,700	2,940
Pennsylvania	120	344	24,697	267	380	1,527
Rhode Island	1,523	1,674	5,002	2,061	1,571	426
South Carolina	5	4	6,615	12	10	1,064
South Dakota	10	1	931	26	35	32
Tennessee	0	0	2,055	0	0	0
Texas	61,382	71,184	1,047,274	61,416	55,785	75,055
Utah	151	138	8,707	188	452	865
Vermont	0	1	138	48	13	3
Virginia	505	998	16,414	761	1,209	1,191
Washington	26	65	6,356	12	268	1,134
West Virginia	16	33	410	23	40	45
Wisconsin	271	436	9,289	610	465	243
Wyoming	5	7	128	8	11	8
Total	R136,572	R168,455	3,196,507	172,457	197,926	239,680

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1995					
	September	August	July	June	May	April
Alabama	418	2,562	1,830	623	293	209
Alaska	2,536	2,706	2,333	2,319	2,615	2,335
Arizona	2,738	5,286	3,821	1,027	707	1,002
Arkansas	4,391	7,508	5,596	4,070	3,167	2,243
California	50,120	58,660	39,441	18,651	18,187	25,880
Colorado	377	358	326	447	220	282
Connecticut	1,077	2,352	2,810	2,202	2,414	1,645
Delaware	2,341	3,165	3,692	1,730	1,236	2,145
District of Columbia	0	0	0	0	0	0
Florida	33,168	32,954	32,565	33,287	31,358	29,875
Georgia	235	3,049	2,478	706	629	231
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	1,228	8,989	5,877	4,308	1,406	1,759
Indiana	166	2,386	1,581	616	432	167
Iowa	278	1,196	609	355	123	246
Kansas	2,281	8,016	6,111	2,590	1,212	1,307
Kentucky	23	87	66	33	95	26
Louisiana	31,977	41,725	40,415	35,649	28,330	22,135
Maine	0	0	0	0	0	0
Maryland	2,163	5,936	4,585	1,568	538	535
Massachusetts	7,340	9,537	9,270	8,232	7,090	6,731
Michigan	2,961	5,909	3,120	3,035	2,465	2,752
Minnesota	719	1,700	1,070	931	729	464
Mississippi	10,892	16,129	14,618	12,311	10,347	6,102
Missouri	808	3,949	2,974	1,150	689	749
Montana	26	141	60	47	14	3
Nebraska	198	782	483	211	113	134
Nevada	4,522	5,977	5,316	3,222	3,051	1,928
New Hampshire	122	547	627	528	395	0
New Jersey	3,362	10,598	10,649	3,563	2,112	1,194
New Mexico	2,286	3,692	3,727	2,839	2,986	3,044
New York	22,888	35,249	34,476	25,784	20,520	16,880
North Carolina	123	1,509	532	158	195	168
North Dakota	0	0	0	0	0	0
Ohio	555	2,794	1,745	504	178	251
Oklahoma	13,154	25,658	22,707	15,774	12,758	12,326
Oregon	2,940	2,932	1,132	0	230	842
Pennsylvania	2,953	5,002	4,538	3,276	1,161	1,122
Rhode Island	545	284	108	7	0	0
South Carolina	1,441	1,897	825	471	185	7
South Dakota	26	449	230	98	7	6
Tennessee	49	1,251	682	73	0	0
Texas	97,312	137,556	129,947	103,034	97,077	79,847
Utah	1,245	1,270	146	175	848	900
Vermont	2	2	5	4	3	2
Virginia	1,223	2,171	1,408	213	1,248	1,093
Washington	2,554	1,062	88	21	8	8
West Virginia	18	29	23	36	39	80
Wisconsin	304	3,004	2,084	1,123	204	228
Wyoming	10	8	32	4	7	7
Total	316,096	468,021	406,758	297,007	257,620	228,889

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.
[R] = Revised Data.
Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.
Source: Form EIA-759, "Monthly Power Plant Report."

Table 18. Natural Gas Deliveries to All Consumers, by State, 1996-1997

(Million Cubic Feet)

State	1997	1996				
	January	Total	December	November	October	September
Alabama	31,500	R296,990	27,319	23,583	22,119	20,332
Alaska	15,754	R148,552	15,166	13,247	12,312	R10,693
Arizona	12,320	R102,298	10,389	7,436	7,463	7,031
Arkansas	27,006	R233,781	22,795	18,544	15,455	14,353
California	177,449	R1,707,167	168,211	149,115	141,022	R138,509
Colorado	NA	R270,081	32,976	23,011	R14,865	R11,832
Connecticut	15,328	R126,655	13,863	10,880	8,940	7,524
Delaware	5,571	R54,125	4,229	4,471	4,241	4,108
District of Columbia	5,022	33,701	4,755	2,456	1,382	1,173
Florida	29,314	R478,956	30,258	34,115	43,675	48,884
Georgia	44,759	R370,880	41,449	36,056	24,373	20,839
Hawaii	238	2,652	219	199	208	211
Idaho	7,543	61,034	6,739	5,427	4,266	3,587
Illinois	173,229	R1,113,544	151,102	123,066	66,501	42,724
Indiana	77,935	568,117	66,160	53,888	R36,632	26,721
Iowa	38,692	R258,269	33,559	27,130	R15,451	11,705
Kansas	35,382	R306,727	34,068	26,472	14,303	15,609
Kentucky	31,225	R208,841	26,021	22,567	13,104	9,468
Louisiana	109,732	NA	112,341	NA	NA	117,049
Maine	778	5,578	601	619	478	271
Maryland	NA	R193,790	22,821	18,729	10,969	9,856
Massachusetts	NA	R352,575	36,611	31,456	28,417	24,605
Michigan	134,610	R989,668	114,278	92,403	56,809	43,754
Minnesota	51,412	R350,550	46,826	36,442	21,218	14,049
Mississippi	19,136	R216,147	R14,262	17,003	14,701	18,432
Missouri	45,376	R285,530	37,252	24,113	R12,326	R9,756
Montana	8,424	55,377	7,463	5,865	3,699	2,517
Nebraska	18,564	R119,060	15,566	R10,482	R7,778	R5,337
Nevada	11,340	R121,764	10,914	8,996	8,928	9,434
New Hampshire	2,545	18,595	2,120	1,856	1,087	719
New Jersey	69,978	R568,547	59,894	43,302	30,790	27,969
New Mexico	16,164	R114,140	13,947	10,595	R7,253	R6,099
New York	NA	NA	NA	NA	NA	NA
North Carolina	25,279	R210,163	23,018	18,744	14,596	11,915
North Dakota	5,227	32,024	4,619	3,219	1,791	1,135
Ohio	134,011	R917,769	111,529	88,642	55,791	35,016
Oklahoma	46,707	R458,333	42,413	32,877	30,172	33,312
Oregon	18,569	R161,633	17,620	15,290	14,366	13,575
Pennsylvania	92,139	R695,939	79,810	63,106	40,230	28,704
Rhode Island	8,804	R81,964	7,968	7,190	6,306	5,616
South Carolina	15,917	R144,920	15,190	12,398	10,765	9,779
South Dakota	5,685	34,566	4,910	3,529	1,711	1,192
Tennessee	33,541	255,525	29,273	23,932	15,968	14,241
Texas	NA	NA	273,464	R253,629	NA	R281,873
Utah	NA	R129,651	16,278	12,744	10,028	7,821
Vermont	1,078	7,324	844	697	439	299
Virginia	30,393	R230,607	28,351	20,904	13,251	10,930
Washington	27,497	232,030	26,216	21,948	17,141	15,951
West Virginia	14,312	118,099	13,251	10,525	7,734	6,749
Wisconsin	NA	R399,549	51,027	43,385	24,041	16,015
Wyoming	NA	R75,849	R9,853	R8,132	R6,744	R3,965
Total	2,338,860	R19,950,332	R2,057,221	R1,732,564	R1,370,381	R1,244,910

See footnotes at end of table.

Table 18. Natural Gas Deliveries to All Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996					
	August	July	June	May	April	March
Alabama	19,593	20,743	[R]19,388	[R]22,384	26,632	29,281
Alaska	11,277	10,709	[R]10,773	[R]10,922	12,065	14,222
Arizona	[R]9,583	8,229	[R]7,237	[R]5,974	7,607	9,180
Arkansas	16,427	16,407	[R]15,543	[R]15,591	20,877	23,458
California	[R]157,850	[R]138,209	[R]119,325	[R]118,768	124,638	136,932
Colorado	[R]12,078	[R]11,736	[R]14,087	[R]18,521	26,966	31,107
Connecticut	7,714	6,750	[R]6,427	[R]7,612	11,035	14,152
Delaware	3,913	3,865	[R]4,587	[R]3,285	4,160	5,467
District of Columbia	1,129	1,216	1,412	2,050	3,623	3,939
Florida	48,289	44,583	[R]43,102	[R]48,597	38,893	[R]33,656
Georgia	22,140	21,421	[R]21,244	[R]23,975	30,727	40,569
Hawaii	204	216	220	215	238	234
Idaho	3,040	3,344	3,719	4,536	5,166	6,416
Illinois	[R]40,200	40,334	[R]43,682	[R]65,026	90,570	131,207
Indiana	25,801	26,095	[R]50,192	[R]23,800	48,030	63,320
Iowa	11,855	11,529	[R]12,929	[R]14,642	21,463	29,517
Kansas	22,086	20,443	[R]19,934	[R]18,311	23,583	31,619
Kentucky	9,138	8,482	[R]11,542	[R]10,460	16,338	24,378
Louisiana	[R]125,047	126,442	[R]124,985	[R]118,351	112,844	114,401
Maine	253	226	278	339	423	652
Maryland	10,124	9,317	[R]9,722	[R]11,650	16,352	22,396
Massachusetts	[R]22,832	[R]17,360	[R]18,985	[R]22,452	30,966	38,096
Michigan	40,163	41,232	[R]46,318	[R]68,149	93,033	123,153
Minnesota	12,873	13,574	[R]15,967	21,334	31,147	42,365
Mississippi	20,596	19,342	[R]20,516	[R]17,860	16,940	17,137
Missouri	11,484	10,217	[R]11,454	[R]15,946	26,353	35,478
Montana	2,217	2,125	2,487	3,594	4,732	5,934
Nebraska	[R]5,580	[R]6,892	[R]5,260	[R]6,827	[R]10,437	[R]13,215
Nevada	10,882	11,277	[R]9,779	[R]9,812	8,913	10,245
New Hampshire	694	656	814	1,252	1,752	2,350
New Jersey	29,780	[R]31,667	[R]31,275	[R]36,891	52,628	64,143
New Mexico	[R]7,366	[R]8,320	[R]8,060	[R]6,690	9,079	9,909
New York	NA	NA	NA	NA	NA	NA
North Carolina	11,647	11,294	[R]12,024	13,678	18,923	21,512
North Dakota	925	942	1,281	2,170	3,212	3,769
Ohio	35,443	34,936	[R]47,570	53,242	80,030	111,938
Oklahoma	[R]39,743	[R]39,918	[R]36,014	[R]33,626	34,163	40,561
Oregon	12,666	11,471	9,482	11,872	10,846	13,312
Pennsylvania	31,894	27,758	[R]32,373	41,927	60,662	83,838
Rhode Island	5,671	4,849	[R]5,296	[R]6,192	6,613	8,498
South Carolina	9,420	9,297	9,916	10,794	13,110	13,543
South Dakota	1,188	1,171	1,502	1,932	2,978	5,043
Tennessee	13,443	12,963	13,556	14,505	21,844	26,568
Texas	NA	[R]324,503	[R]308,851	[R]321,382	[R]292,108	310,615
Utah	6,544	6,510	5,643	6,988	10,578	12,315
Vermont	272	227	339	497	685	962
Virginia	[R]12,380	12,873	[R]11,109	[R]13,466	17,731	[R]28,783
Washington	15,489	12,883	12,980	16,524	18,409	22,245
West Virginia	5,913	6,024	5,790	7,267	10,514	13,456
Wisconsin	15,625	14,035	[R]17,634	[R]24,608	34,119	48,084
Wyoming	[R]3,913	[R]3,685	[R]4,622	[R]5,819	[R]6,747	[R]6,641
Total	[R]1,324,029	[R]1,287,559	[R]1,309,623	[R]1,415,032	[R]1,664,680	[R]2,017,176

See footnotes at end of table.

Table 18. Natural Gas Deliveries to All Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1996		1995			
	February	January	Total	December	November	October
Alabama	33,118	32,499	287,239	28,963	23,381	20,043
Alaska	14,370	12,796	134,996	12,726	10,307	9,190
Arizona	9,858	12,308	101,731	8,762	6,361	5,351
Arkansas	26,518	27,813	240,071	24,157	18,503	16,563
California	148,523	R166,064	1,839,721	163,271	141,117	143,028
Colorado	37,595	35,307	247,180	25,542	20,007	13,350
Connecticut	15,422	16,336	131,130	13,952	10,343	6,867
Delaware	5,148	6,651	60,658	5,333	5,165	4,478
District of Columbia	5,070	5,495	32,735	4,773	2,362	1,247
Florida	31,778	33,126	507,329	38,384	41,005	44,326
Georgia	39,687	48,401	362,734	45,832	37,428	27,085
Hawaii	241	247	2,773	223	221	223
Idaho	7,356	7,439	57,407	6,178	5,305	4,328
Illinois	147,434	171,695	1,065,238	150,677	122,315	65,148
Indiana	68,685	78,793	527,719	67,428	52,765	32,397
Iowa	31,838	36,652	251,262	34,779	27,190	17,145
Kansas	36,257	44,044	286,430	36,741	22,381	16,329
Kentucky	25,967	31,376	196,392	27,754	22,164	12,598
Louisiana	110,488	110,179	1,443,515	111,753	111,708	117,082
Maine	693	743	5,333	709	593	376
Maryland	24,298	27,557	191,272	23,769	16,788	10,160
Massachusetts	39,621	41,174	360,429	38,915	29,250	21,124
Michigan	131,901	138,475	936,466	127,454	90,578	54,297
Minnesota	44,184	50,570	333,900	46,101	35,421	21,711
Mississippi	19,284	20,073	242,887	20,617	16,534	14,668
Missouri	43,511	47,640	271,956	36,814	23,737	12,821
Montana	7,379	7,365	51,660	6,443	5,486	3,935
Nebraska	R15,592	R16,093	132,923	NA	NA	NA
Nevada	10,560	12,024	110,273	9,616	7,869	7,477
New Hampshire	2,595	2,701	19,877	2,329	1,629	957
New Jersey	76,135	84,073	588,315	76,194	50,145	30,355
New Mexico	11,189	15,632	105,796	11,879	9,301	5,555
New York	NA	NA	1,131,325	122,091	96,317	68,756
North Carolina	25,453	27,358	196,626	22,610	17,125	12,641
North Dakota	4,599	4,362	29,371	4,046	2,905	1,522
Ohio	121,775	141,857	877,112	123,470	90,931	51,937
Oklahoma	45,614	49,920	456,674	39,265	32,367	28,987
Oregon	15,649	15,484	138,545	13,661	12,166	11,392
Pennsylvania	91,367	114,269	680,495	89,477	72,297	38,110
Rhode Island	8,208	9,559	69,520	10,522	7,171	3,525
South Carolina	14,966	15,743	148,980	13,776	12,196	11,065
South Dakota	4,614	4,795	31,164	4,008	3,215	1,943
Tennessee	33,026	36,206	239,100	28,212	23,469	14,742
Texas	293,918	R323,160	3,387,065	293,668	253,956	265,673
Utah	17,039	17,162	126,981	14,931	11,120	10,024
Vermont	1,015	1,049	7,268	1,065	653	400
Virginia	29,425	31,401	239,616	31,620	21,147	13,455
Washington	26,815	25,428	211,791	22,286	19,597	16,021
West Virginia	14,859	16,018	113,908	13,999	11,239	7,619
Wisconsin	51,803	59,172	376,291	53,338	42,409	23,685
Wyoming	R8,408	R7,319	70,986	NA	NA	NA
Total	R2,151,272	R2,375,885	19,657,487	2,136,187	1,719,670	1,336,124

See footnotes at end of table.

Table 18. Natural Gas Deliveries to All Consumers, by State, 1996-1997

(Million Cubic Feet) — Continued

State	1995					
	September	August	July	June	May	April
Alabama	18,901	22,417	21,383	20,091	20,461	22,115
Alaska	11,378	14,831	11,185	12,175	8,820	10,392
Arizona	7,399	10,089	8,619	6,491	7,236	8,499
Arkansas	17,190	20,983	18,603	17,200	17,692	18,085
California	150,812	158,235	144,757	124,518	141,051	154,312
Colorado	11,621	11,284	12,080	17,218	21,503	23,069
Connecticut	6,053	7,325	8,234	7,779	9,964	12,362
Delaware	4,341	5,167	5,554	3,959	4,177	5,352
District of Columbia	1,166	1,123	1,250	1,356	1,971	2,907
Florida	46,317	46,589	46,721	46,941	46,431	45,636
Georgia	18,998	23,083	22,122	21,007	22,710	26,704
Hawaii	224	221	234	238	234	232
Idaho	3,164	2,891	3,047	3,849	4,419	5,059
Illinois	43,840	47,059	43,351	43,714	54,427	85,099
Indiana	25,643	26,751	25,035	25,553	32,681	42,586
Iowa	12,417	12,414	11,704	11,806	15,908	21,295
Kansas	17,252	26,376	21,191	14,863	19,685	21,030
Kentucky	9,069	8,591	8,291	8,683	11,145	13,232
Louisiana	120,846	131,803	131,556	123,249	125,404	115,722
Maine	272	256	231	260	347	474
Maryland	9,699	13,982	12,385	9,871	11,213	14,731
Massachusetts	21,269	23,772	23,915	25,252	26,306	34,707
Michigan	42,277	42,421	38,748	44,061	61,001	86,986
Minnesota	14,748	14,677	13,977	14,446	18,879	28,283
Mississippi	18,231	24,998	23,005	21,026	19,878	15,818
Missouri	10,631	13,080	12,149	11,608	16,026	20,383
Montana	2,527	2,295	2,303	2,545	3,659	4,624
Nebraska	NA	8,600	8,481	6,070	7,953	9,786
Nevada	8,850	10,303	9,813	8,130	8,938	8,161
New Hampshire	844	1,201	1,338	1,347	1,551	1,827
New Jersey	30,005	36,339	36,550	29,961	35,930	48,990
New Mexico	6,008	7,625	6,960	6,953	8,162	8,881
New York	62,723	76,209	78,400	71,433	78,882	99,302
North Carolina	11,481	12,870	11,112	11,840	12,495	15,366
North Dakota	996	898	1,045	1,273	1,906	2,893
Ohio	36,514	36,657	34,751	36,383	49,791	72,777
Oklahoma	32,034	46,313	40,170	36,169	34,551	35,227
Oregon	9,853	10,405	8,270	7,480	9,474	11,232
Pennsylvania	30,890	32,096	31,890	32,426	39,436	58,069
Rhode Island	3,877	4,258	3,859	4,000	5,335	6,483
South Carolina	11,040	11,710	9,728	11,205	10,887	11,636
South Dakota	1,164	1,448	1,312	1,460	2,000	2,891
Tennessee	13,796	13,761	12,798	13,722	12,624	18,435
Texas	272,935	308,457	322,408	275,621	298,149	274,195
Utah	7,419	6,586	5,285	6,249	8,937	11,165
Vermont	266	267	274	328	451	739
Virginia	13,321	17,649	15,572	12,074	15,174	17,515
Washington	15,141	13,415	10,872	11,716	13,765	18,396
West Virginia	5,952	5,757	5,347	5,713	7,514	9,480
Wisconsin	16,609	17,229	15,075	15,254	20,587	32,181
Wyoming	NA	4,275	4,203	5,246	5,800	6,361
Total	1,249,730	1,397,041	1,347,142	1,251,815	1,413,521	1,621,680

R = Revised Data.
NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 19. Average City Gate Price, by State, 1996-1997

(Dollars per Thousand Cubic Feet)

State	1997	1996						
	January	Total	December	November	October	September	August	July
Alabama	4.44	3.48	4.07	3.63	3.44	3.62	4.11	4.04
Alaska	1.41	1.58	1.59	1.60	1.55	1.57	1.54	1.54
Arizona	4.21	2.78	4.14	3.29	2.66	3.02	3.58	2.94
Arkansas	4.18	2.76	3.68	3.04	2.46	2.29	2.59	2.76
California	4.15	2.59	3.81	3.00	2.38	2.35	2.78	2.43
Colorado	NA	R2.71	4.91	3.13	2.65	2.28	2.29	R2.29
Connecticut	5.82	5.11	6.15	4.60	4.46	4.65	4.42	4.75
Delaware	6.92	3.59	4.82	3.42	2.85	3.03	3.80	4.22
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.61	3.69	4.49	3.90	3.28	3.03	3.57	3.58
Georgia	4.80	3.76	4.66	3.71	3.14	3.32	4.00	4.20
Hawaii	6.16	6.05	6.67	6.30	6.33	6.00	6.05	6.34
Idaho	2.37	2.24	2.30	2.10	2.11	2.72	2.48	5.26
Illinois	3.79	3.27	4.05	3.25	2.65	2.80	3.25	3.69
Indiana	4.08	NA	NA	3.16	2.49	2.04	2.70	3.30
Iowa	3.99	3.47	4.09	3.46	3.12	4.28	7.96	7.45
Kansas	4.43	3.07	3.77	3.38	2.91	2.65	3.08	3.57
Kentucky	4.20	3.41	4.40	3.59	2.94	3.16	3.04	3.07
Louisiana	3.84	3.13	4.30	3.24	2.20	2.26	2.69	3.01
Maine	4.96	4.29	4.34	3.64	3.93	3.91	4.35	5.04
Maryland	NA	3.98	4.65	3.71	3.44	5.20	4.85	6.04
Massachusetts	NA	4.01	4.82	3.72	3.60	5.36	5.68	5.53
Michigan	3.98	2.90	3.73	3.07	2.49	2.31	2.98	2.87
Minnesota	4.51	3.07	3.78	3.19	2.65	2.91	3.32	4.13
Mississippi	4.25	R3.29	R4.34	3.14	2.83	2.59	2.89	3.10
Missouri	4.05	3.25	4.03	3.20	3.47	4.14	5.12	4.82
Montana	3.74	3.03	3.46	3.04	3.08	3.24	4.11	3.60
Nebraska	4.43	3.06	3.99	3.11	2.93	2.69	4.83	3.30
Nevada	4.13	3.22	3.97	3.46	2.96	3.22	3.80	3.44
New Hampshire	4.93	4.20	5.01	4.15	3.19	3.86	4.47	5.03
New Jersey	4.70	3.82	4.90	3.84	3.12	3.51	3.71	3.77
New Mexico	3.86	1.99	3.60	2.68	1.88	1.66	2.07	1.60
New York	NA	3.29	4.38	3.03	2.86	2.61	3.15	3.13
North Carolina	4.36	3.74	4.26	3.48	3.22	3.67	3.94	3.75
North Dakota	4.22	2.94	3.80	3.10	2.49	2.54	3.44	2.90
Ohio	5.68	4.37	4.79	4.95	5.06	6.11	5.58	4.53
Oklahoma	3.52	2.54	2.84	2.11	1.99	2.53	2.65	2.51
Oregon	2.95	2.42	2.95	2.41	2.24	2.98	3.15	3.89
Pennsylvania	4.22	3.97	4.43	4.11	4.03	4.25	5.07	5.40
Rhode Island	NA	4.41	5.20	4.04	3.91	5.94	6.51	7.46
South Carolina	4.20	3.90	4.60	3.76	3.26	3.53	3.87	4.01
South Dakota	4.11	3.19	3.98	3.37	2.87	3.42	6.37	4.74
Tennessee	4.03	4.04	6.64	3.71	2.92	3.39	3.67	3.48
Texas	4.73	3.23	4.21	3.49	2.73	2.95	3.06	3.04
Utah	NA	2.25	2.39	3.32	1.66	2.22	2.08	2.15
Vermont	NA	2.74	2.67	2.49	2.18	2.36	2.69	3.68
Virginia	5.14	3.89	5.13	3.69	3.34	3.40	4.42	4.52
Washington	3.45	2.44	3.14	2.50	1.94	2.71	3.21	3.57
West Virginia	3.70	3.33	3.53	3.25	3.57	3.77	4.29	3.66
Wisconsin	NA	3.37	4.12	3.61	3.00	3.87	4.71	4.65
Wyoming	NA	NA	2.55	R2.18	R1.91	R2.84	R2.92	R2.44
Total	4.17	3.34	R4.20	R3.46	2.93	3.03	3.47	R3.48

See footnotes at end of table.

Table 19. Average City Gate Price, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1996						1995	
	June	May	April	March	February	January	Total	December
Alabama	3.78	3.52	3.27	3.15	3.35	3.13	2.89	2.83
Alaska	1.57	1.56	1.58	1.60	1.60	1.56	1.67	1.67
Arizona	2.57	2.46	2.05	1.97	2.36	2.08	2.10	1.86
Arkansas	2.82	2.59	2.50	2.57	2.52	2.52	2.32	2.46
California	2.56	2.14	2.22	2.42	2.25	2.29	2.03	1.90
Colorado	2.40	2.50	2.93	2.16	2.18	2.08	2.65	2.60
Connecticut	5.03	4.94	5.22	4.66	5.37	5.55	4.70	4.60
Delaware	3.44	3.18	3.75	4.20	3.43	3.27	2.70	3.01
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.31	3.39	3.97	3.83	3.60	3.84	2.74	3.32
Georgia	3.66	3.74	3.51	3.82	3.36	3.71	2.96	2.95
Hawaii	6.27	6.32	5.74	5.53	5.49	5.60	5.20	4.65
Idaho	3.39	2.28	2.21	2.12	2.08	1.98	2.18	1.98
Illinois	3.12	2.83	2.93	3.49	3.73	2.66	2.59	2.53
Indiana	3.10	2.56	2.90	3.06	3.32	3.11	2.84	2.82
Iowa	4.61	4.19	3.13	2.82	3.03	2.62	2.82	2.73
Kansas	3.51	3.22	3.23	2.70	2.67	2.66	2.36	2.44
Kentucky	3.08	3.83	3.50	3.29	3.05	3.19	2.80	2.87
Louisiana	2.71	2.65	3.06	3.29	3.24	3.58	2.21	2.78
Maine	5.51	5.32	5.34	4.01	3.89	3.95	3.35	3.08
Maryland	5.63	4.35	4.01	3.70	3.23	3.82	2.87	2.68
Massachusetts	6.05	4.40	3.97	3.32	3.17	3.65	3.53	3.35
Michigan	2.64	2.69	2.80	3.11	2.91	3.14	2.61	2.81
Minnesota	2.88	2.81	2.72	2.79	2.78	2.90	2.52	2.65
Mississippi	2.90	2.70	3.37	3.36	3.07	3.49	2.53	3.23
Missouri	4.51	3.86	3.20	2.61	2.59	2.52	2.73	2.57
Montana	3.05	2.81	3.18	2.52	2.98	2.83	3.01	2.72
Nebraska	3.50	3.41	3.04	2.71	2.45	2.66	2.49	2.34
Nevada	3.37	3.68	3.32	2.64	2.75	2.51	2.73	2.20
New Hampshire	4.64	4.09	4.09	4.06	3.99	4.14	3.39	3.60
New Jersey	3.82	4.61	3.75	3.15	3.49	4.09	3.34	3.40
New Mexico	1.40	1.22	1.18	1.40	1.69	1.53	1.46	1.44
New York	3.17	3.18	3.40	3.34	3.19	3.42	2.47	2.98
North Carolina	3.75	3.69	3.95	3.60	3.66	3.65	2.95	2.95
North Dakota	2.78	2.64	2.62	2.45	2.82	2.94	2.58	2.55
Ohio	8.17	4.87	4.06	3.90	3.80	3.81	3.84	3.46
Oklahoma	2.40	2.61	2.53	2.58	2.60	2.46	2.52	2.27
Oregon	2.11	2.40	2.27	2.19	1.96	2.06	2.42	1.71
Pennsylvania	4.96	3.94	4.66	3.62	3.28	3.26	3.09	2.95
Rhode Island	6.42	5.06	3.53	3.85	3.92	3.28	3.57	3.34
South Carolina	3.49	3.96	3.96	3.94	3.77	4.01	3.25	3.27
South Dakota	3.96	2.92	2.63	2.84	2.79	2.54	2.88	2.68
Tennessee	3.67	3.72	3.28	3.29	4.56	4.50	2.71	3.01
Texas	2.91	2.81	3.13	3.05	3.13	3.20	2.95	3.06
Utah	2.12	1.93	1.98	2.34	2.10	2.27	2.88	2.43
Vermont	3.01	2.66	3.10	2.83	2.82	2.93	2.61	2.38
Virginia	4.93	4.00	3.38	3.58	3.36	3.88	2.92	3.10
Washington	3.39	2.30	2.23	1.99	2.12	1.98	2.18	2.07
West Virginia	3.28	3.89	3.26	3.24	3.48	2.60	2.85	3.04
Wisconsin	4.81	3.42	3.48	2.88	2.78	2.87	2.83	2.75
Wyoming	NA	NA	NA	NA	NA	NA	2.72	NA
Total	3.39	3.18	3.22	3.17	3.16	3.13	2.78	2.83

See footnotes at end of table.

Table 19. Average City Gate Price, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1995							
	November	October	September	August	July	June	May	April
Alabama	2.84	3.52	3.50	3.20	3.83	3.58	3.34	2.90
Alaska	1.66	1.63	1.64	1.57	1.63	1.60	1.70	1.79
Arizona	2.19	2.24	2.44	2.36	2.20	2.17	2.00	1.78
Arkansas	2.28	2.19	2.01	1.91	2.33	2.25	2.36	2.41
California	2.15	2.14	2.06	2.25	2.18	1.84	2.03	2.12
Colorado	2.56	2.41	2.89	3.84	3.70	2.96	2.41	3.04
Connecticut	4.13	4.27	4.80	5.30	5.54	5.11	5.28	4.74
Delaware	2.89	2.81	2.85	2.48	1.73	3.38	3.20	3.11
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.05	2.75	2.75	2.47	2.50	2.75	2.53	2.92
Georgia	2.80	3.00	3.49	2.81	2.88	3.16	3.17	2.84
Hawaii	5.43	5.90	5.78	4.25	6.12	5.98	4.38	4.52
Idaho	2.14	1.83	2.79	2.72	2.89	2.43	2.28	2.21
Illinois	2.32	2.94	3.58	3.02	3.45	3.14	3.16	2.40
Indiana	2.67	2.96	3.57	3.18	3.26	3.63	3.11	2.81
Iowa	2.63	2.84	3.41	3.48	3.55	3.39	3.10	2.97
Kansas	2.38	2.82	2.80	2.52	2.19	3.09	2.25	2.18
Kentucky	2.45	2.61	2.51	2.80	2.92	3.18	3.32	3.14
Louisiana	2.44	2.23	2.05	1.90	2.00	2.04	2.10	2.12
Maine	3.03	2.72	3.54	5.13	5.99	5.81	2.72	3.41
Maryland	2.71	3.44	3.95	3.25	3.34	3.88	3.51	2.82
Massachusetts	3.14	4.13	4.78	4.57	4.64	4.58	4.71	3.22
Michigan	2.56	2.54	2.61	2.50	2.41	2.43	2.49	2.46
Minnesota	2.50	2.43	2.63	2.84	2.79	2.91	2.56	2.27
Mississippi	2.71	2.77	2.43	2.21	2.34	2.50	2.46	2.39
Missouri	2.55	3.21	3.85	3.97	4.06	3.99	3.08	2.83
Montana	2.65	2.68	3.01	2.06	2.92	3.38	2.99	2.94
Nebraska	2.43	2.80	2.97	3.11	3.42	2.69	2.68	2.18
Nevada	2.62	2.64	3.23	3.06	3.46	2.92	2.86	2.35
New Hampshire	3.44	2.89	3.33	3.70	4.56	4.40	2.93	2.81
New Jersey	3.45	3.74	3.40	3.72	4.02	3.60	3.21	3.25
New Mexico	1.58	1.42	1.40	1.11	1.50	1.33	1.34	1.53
New York	2.61	2.53	2.32	2.12	2.20	2.40	2.42	2.30
North Carolina	2.77	2.98	3.59	3.24	3.48	3.15	3.06	3.06
North Dakota	2.25	2.31	2.49	1.95	2.25	2.45	2.45	2.43
Ohio	3.34	4.01	3.85	4.87	4.63	4.19	4.12	3.95
Oklahoma	2.24	1.97	1.93	2.39	2.33	2.35	2.46	2.57
Oregon	2.36	2.41	2.96	2.82	3.16	2.69	2.77	2.38
Pennsylvania	2.63	3.22	3.34	3.97	4.04	3.73	3.21	2.94
Rhode Island	3.13	4.54	5.28	5.85	6.46	5.53	4.20	3.25
South Carolina	3.16	3.04	3.63	3.43	3.71	3.74	3.47	3.04
South Dakota	2.62	2.73	3.51	3.93	3.86	3.84	2.99	2.64
Tennessee	2.68	2.69	2.72	2.64	3.10	3.25	2.68	2.69
Texas	2.97	2.75	2.74	2.62	2.63	2.81	2.72	3.19
Utah	2.46	2.18	3.16	2.40	2.56	3.41	2.55	2.48
Vermont	2.19	2.89	3.16	3.04	3.20	3.37	3.56	2.68
Virginia	2.57	3.40	2.22	3.08	3.00	3.46	3.36	2.78
Washington	2.14	2.02	2.06	1.98	1.79	1.93	1.92	2.21
West Virginia	2.26	3.48	3.46	3.13	3.40	2.83	2.99	2.63
Wisconsin	2.48	2.99	3.37	3.71	3.81	4.15	2.81	2.64
Wyoming	NA	NA	NA	2.67	2.49	2.64	2.80	2.63
Total	2.67	2.83	2.89	2.87	2.89	2.89	2.80	2.72

R = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 20. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet)

State	1997	1996						
	January	Total	December	November	October	September	August	July
Alabama	7.62	7.20	7.34	7.82	9.68	10.60	10.95	10.74
Alaska	3.63	3.42	3.32	3.37	3.46	3.77	3.82	3.87
Arizona	6.62	7.50	6.83	7.41	9.25	10.03	10.37	9.99
Arkansas	6.48	5.90	6.62	6.03	7.03	7.72	8.27	8.41
California	6.27	6.43	6.19	6.40	6.66	5.93	6.84	8.27
Colorado	NA	R4.32	3.88	4.24	4.91	6.28	6.64	R6.13
Connecticut	10.41	10.08	10.49	10.26	10.58	10.65	10.69	10.34
Delaware	7.53	7.10	7.71	7.98	9.02	10.51	10.12	10.20
District of Columbia	9.81	8.84	9.83	8.83	9.86	10.37	7.52	7.80
Florida	10.57	11.41	11.27	12.72	13.80	14.22	14.49	13.77
Georgia	6.53	6.66	6.72	5.81	8.49	10.28	10.46	10.93
Hawaii	21.15	19.91	19.60	20.81	21.05	20.57	20.60	20.91
Idaho	4.81	5.18	4.88	5.21	5.59	6.09	6.45	6.33
Illinois	6.15	5.27	5.13	5.05	5.93	8.13	9.25	8.42
Indiana	5.82	R5.49	R5.25	5.54	R6.57	8.47	8.71	8.45
Iowa	5.57	5.56	5.78	5.37	6.74	9.26	12.82	8.98
Kansas	6.34	5.66	5.83	5.52	6.52	7.15	8.46	7.28
Kentucky	5.87	5.57	6.13	5.76	6.65	7.88	8.43	8.14
Louisiana	7.30	6.75	7.29	7.74	8.30	8.33	8.70	9.29
Maine	8.10	7.88	8.53	8.05	7.04	8.23	8.90	8.57
Maryland	NA	7.70	7.64	9.20	9.86	10.48	10.70	10.63
Massachusetts	NA	8.93	9.47	9.46	7.49	9.24	9.50	9.04
Michigan	5.04	4.89	4.99	4.94	5.50	6.45	7.21	7.07
Minnesota	6.50	5.46	6.17	5.46	5.47	6.65	7.66	7.49
Mississippi	6.17	R5.98	R16.14	6.08	6.14	6.06	6.19	6.26
Missouri	6.67	5.97	6.02	5.94	7.58	9.53	10.20	9.53
Montana	4.47	4.89	4.62	4.92	5.56	6.22	6.67	6.34
Nebraska	6.23	R5.34	5.78	R5.42	R6.04	7.33	7.56	7.24
Nevada	5.54	6.19	5.69	6.05	7.40	7.91	8.13	7.66
New Hampshire	9.10	7.34	8.34	8.60	6.99	8.19	8.51	8.38
New Jersey	7.62	R7.37	7.10	7.37	8.05	8.80	8.95	R9.20
New Mexico	5.79	4.30	3.58	3.66	5.58	8.21	7.08	4.44
New York	NA	NA	NA	NA	NA	NA	NA	10.86
North Carolina	8.77	7.57	7.88	8.19	9.90	12.48	12.77	11.10
North Dakota	4.43	4.56	4.36	4.37	5.42	6.88	7.33	7.10
Ohio	6.68	5.88	6.26	6.53	7.26	8.38	8.94	8.07
Oklahoma	6.44	5.57	5.25	5.91	8.02	9.06	9.46	9.18
Oregon	5.73	6.25	5.90	6.24	6.95	7.78	8.20	7.74
Pennsylvania	7.64	7.39	7.60	7.73	8.59	10.72	10.31	10.24
Rhode Island	8.79	8.60	8.68	9.36	9.90	11.33	11.29	11.05
South Carolina	8.67	7.62	8.07	7.71	8.44	9.52	9.99	9.84
South Dakota	5.50	5.25	5.39	5.41	5.94	7.74	11.79	8.33
Tennessee	6.84	6.33	6.18	6.00	7.17	8.54	8.87	8.54
Texas	6.35	5.77	6.04	5.24	6.97	7.73	8.24	7.87
Utah	NA	4.47	4.75	4.81	3.79	4.15	5.19	4.99
Vermont	6.04	6.40	6.19	6.42	7.21	8.41	8.92	8.73
Virginia	8.87	7.94	8.48	8.26	9.78	11.94	12.50	12.40
Washington	5.39	5.63	5.43	5.59	6.08	6.86	7.17	6.71
West Virginia	6.68	7.05	6.83	7.04	7.58	9.26	10.28	9.77
Wisconsin	NA	6.00	6.86	6.24	5.07	6.00	6.34	6.26
Wyoming	NA	R4.16	3.87	R3.66	R3.85	R5.16	R5.54	R5.57
Total	6.69	6.30	R6.40	R6.33	7.02	7.94	R8.62	R8.55

See footnotes at end of table.

Table 20. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1996						1995	
	June	May	April	March	February	January	Total	December
Alabama	10.53	8.08	6.87	6.82	6.33	5.97	6.86	5.97
Alaska	3.71	3.53	3.40	3.34	3.30	3.32	3.63	3.51
Arizona	9.32	8.67	7.57	6.97	6.80	6.60	7.82	7.04
Arkansas	7.85	6.72	5.44	5.40	5.25	5.22	5.48	4.46
California	6.98	6.38	6.00	6.20	6.32	6.47	6.42	5.92
Colorado	5.10	4.42	4.20	4.10	4.02	4.02	4.80	4.29
Connecticut	9.94	9.62	10.06	9.80	9.85	10.00	10.00	9.46
Delaware	8.86	7.78	6.70	6.38	6.25	6.32	6.60	6.09
District of Columbia	9.02	9.83	10.18	8.96	8.42	7.37	8.03	7.26
Florida	13.63	12.55	10.95	10.55	9.93	9.61	9.85	9.19
Georgia	11.34	10.43	7.30	5.54	5.97	5.06	6.18	4.98
Hawaii	20.22	20.54	19.29	19.21	18.82	18.20	17.55	18.80
Idaho	5.70	5.38	5.28	5.06	4.98	4.97	5.59	5.29
Illinois	8.20	6.76	5.51	4.91	4.55	4.24	4.66	4.18
Indiana	7.83	6.52	5.73	5.07	4.85	4.68	5.37	4.55
Iowa	7.96	6.26	5.13	4.82	4.86	4.51	5.09	4.89
Kansas	7.70	6.87	5.77	5.31	5.17	4.99	4.91	5.04
Kentucky	7.53	7.24	5.13	5.11	4.71	4.82	5.05	4.52
Louisiana	8.52	8.18	7.00	5.64	5.44	6.11	6.01	6.14
Maine	8.06	8.27	8.27	7.88	7.78	7.02	7.32	7.01
Maryland	9.69	8.38	7.19	6.99	6.83	6.47	6.62	6.19
Massachusetts	7.84	6.95	9.42	9.02	9.01	9.00	9.04	8.86
Michigan	6.45	5.12	4.72	4.37	4.53	4.45	4.72	4.49
Minnesota	6.69	5.76	5.37	4.96	4.87	4.94	4.80	4.80
Mississippi	6.15	5.96	5.46	5.36	4.75	5.26	5.28	5.18
Missouri	8.45	6.87	5.71	5.47	5.31	5.11	5.16	5.10
Montana	5.32	4.94	4.71	4.65	4.59	4.66	5.15	4.80
Nebraska	6.36	5.65	5.12	4.94	4.73	4.78	4.83	4.74
Nevada	7.04	6.68	6.22	5.86	5.76	5.64	6.76	5.97
New Hampshire	7.23	6.29	5.89	7.31	7.19	7.03	7.16	7.18
New Jersey	8.81	7.16	7.58	7.12	7.06	7.01	7.27	7.03
New Mexico	4.21	11.39	4.60	4.54	4.16	3.42	5.04	3.55
New York	9.83	8.64	8.22	7.93	8.01	7.73	8.42	7.77
North Carolina	11.45	9.04	7.29	7.52	6.81	6.13	6.93	6.21
North Dakota	5.78	4.46	4.43	4.31	4.20	4.28	4.66	4.29
Ohio	7.04	6.31	5.37	5.33	5.38	4.92	5.46	4.97
Oklahoma	8.43	6.87	5.21	5.09	4.76	4.74	5.56	5.04
Oregon	6.93	6.50	6.34	6.17	5.67	6.05	6.74	6.32
Pennsylvania	9.08	8.21	7.38	6.73	6.68	6.42	7.16	5.60
Rhode Island	9.82	8.39	7.92	8.06	7.88	7.97	8.02	7.89
South Carolina	9.09	8.12	6.97	7.68	7.40	7.02	7.54	6.76
South Dakota	6.65	5.65	5.21	4.36	4.67	4.43	5.05	4.86
Tennessee	8.40	7.34	6.70	6.51	6.04	5.53	5.77	6.26
Texas	7.21	6.81	5.98	5.32	5.06	4.84	5.92	5.23
Utah	5.40	4.59	3.90	4.94	3.97	4.51	4.74	4.72
Vermont	7.49	6.59	6.24	6.09	6.02	5.98	6.82	6.09
Virginia	10.73	8.78	7.53	6.88	7.23	6.83	7.18	6.44
Washington	6.06	5.71	5.59	5.44	5.38	5.41	5.89	5.57
West Virginia	9.21	7.55	6.94	6.74	6.69	6.67	7.05	6.67
Wisconsin	5.81	5.56	5.90	5.87	5.75	5.90	5.82	5.88
Wyoming	[R]4.90	[R]4.47	[R]4.31	[R]4.19	[R]3.94	[R]4.14	4.83	[NA]
Total	7.75	6.80	6.22	5.89	5.78	5.60	6.06	5.54

See footnotes at end of table.

Table 20. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1995							
	November	October	September	August	July	June	May	April
Alabama	6.61	8.86	9.41	9.34	9.06	8.81	8.16	7.67
Alaska	3.60	3.76	3.96	4.14	4.02	3.87	3.72	3.57
Arizona	8.18	9.33	10.04	10.51	9.72	9.12	8.30	7.81
Arkansas	5.65	6.99	7.51	8.01	7.66	7.20	6.46	5.70
California	5.78	6.66	6.90	6.76	6.88	7.11	6.58	6.22
Colorado	4.52	5.24	6.62	6.71	5.96	5.12	4.86	4.78
Connecticut	9.96	11.06	11.11	11.34	11.12	10.65	10.28	9.81
Delaware	6.83	8.27	8.95	8.86	8.64	8.09	7.04	6.53
District of Columbia	7.74	9.62	10.18	7.48	7.22	7.05	9.58	9.19
Florida	10.60	12.16	11.61	12.22	11.89	11.78	11.30	10.29
Georgia	4.79	6.72	7.95	8.70	8.55	8.34	7.54	7.39
Hawaii	17.92	17.89	17.84	17.91	18.04	17.44	17.39	17.30
Idaho	5.46	5.77	6.42	6.69	6.46	6.20	5.25	5.76
Illinois	4.10	4.82	6.07	6.97	6.05	6.57	5.72	4.60
Indiana	4.67	5.67	7.09	7.89	7.63	7.37	6.47	5.63
Iowa	4.56	5.53	7.46	8.85	8.71	9.00	6.04	5.01
Kansas	5.22	5.73	6.46	6.96	6.24	5.94	5.17	4.74
Kentucky	4.27	5.94	7.78	8.30	7.95	8.26	6.06	5.85
Louisiana	6.33	7.68	7.70	7.61	7.88	7.05	6.99	5.95
Maine	7.21	7.17	7.78	8.37	8.23	7.75	6.60	7.70
Maryland	6.50	7.72	8.64	9.23	9.17	8.73	7.23	6.48
Massachusetts	9.53	8.24	9.33	9.85	9.33	8.31	7.20	9.53
Michigan	4.64	5.23	6.16	7.08	6.69	6.04	5.06	4.53
Minnesota	4.82	5.28	6.07	6.57	4.54	6.00	5.11	4.46
Mississippi	5.47	6.43	6.74	6.15	6.31	6.36	6.27	5.65
Missouri	5.45	6.71	8.20	9.03	8.20	7.33	5.29	4.99
Montana	4.93	5.48	6.13	6.57	6.04	5.59	5.28	5.14
Nebraska	4.96	5.84	6.32	6.59	6.35	5.94	5.09	4.71
Nevada	6.92	8.05	8.53	8.57	8.06	7.46	6.89	6.60
New Hampshire	7.77	7.24	7.96	8.73	8.16	7.27	6.12	5.65
New Jersey	7.20	8.29	9.84	9.55	9.28	8.92	7.66	7.01
New Mexico	3.86	5.51	7.26	7.43	8.63	5.76	6.13	5.45
New York	8.70	11.09	11.81	12.00	11.64	10.20	8.70	7.88
North Carolina	6.50	8.94	10.65	11.61	10.54	9.89	8.00	7.12
North Dakota	4.50	6.32	6.69	7.55	6.93	5.86	5.02	4.42
Ohio	5.01	6.10	7.15	7.64	7.41	6.98	5.70	5.39
Oklahoma	5.84	7.32	8.46	8.80	8.20	7.44	6.12	5.72
Oregon	6.75	7.57	8.37	8.57	8.11	7.66	6.40	6.75
Pennsylvania	6.42	8.00	10.11	10.63	10.21	9.43	8.15	7.24
Rhode Island	8.70	9.41	10.45	10.65	11.15	8.33	8.27	7.87
South Carolina	6.84	8.27	8.96	9.48	8.99	8.77	7.87	7.97
South Dakota	5.07	5.05	7.09	8.57	7.62	6.96	5.49	4.75
Tennessee	4.31	6.92	8.26	8.10	7.73	7.44	6.45	6.16
Texas	5.77	7.08	7.71	8.04	7.52	7.36	6.78	6.23
Utah	4.99	4.09	4.68	5.28	5.36	4.96	4.52	4.25
Vermont	6.88	7.92	9.03	9.81	9.35	8.12	7.25	6.67
Virginia	5.55	9.33	10.86	10.94	10.81	10.59	8.47	7.35
Washington	5.68	6.26	7.04	7.26	7.08	6.56	6.19	5.89
West Virginia	6.91	7.77	9.11	10.02	9.95	9.31	7.55	7.02
Wisconsin	5.74	5.14	5.83	6.36	6.39	5.99	5.73	5.81
Wyoming	NA	NA	NA	6.16	5.73	5.06	4.82	4.78
Total	5.61	6.62	7.73	8.13	7.82	7.49	6.54	6.06

R = Revised Data.
NA = Not Available.

Notes: Data for 1995 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet)

State	1997	1996						
	January	Total	December	November	October	September	August	July
Alabama	6.97	6.18	6.49	6.30	6.59	6.80	6.87	6.81
Alaska	2.63	2.29	2.36	2.31	2.20	2.00	1.87	2.13
Arizona	5.01	4.98	4.95	4.98	5.12	5.15	5.11	5.06
Arkansas	5.42	4.68	5.58	5.01	4.71	4.86	4.85	4.97
California	7.18	6.02	6.43	5.55	5.75	5.52	5.31	5.56
Colorado	NA	3.57	3.23	3.32	3.66	3.82	3.92	R3.80
Connecticut	8.09	7.37	7.86	7.80	6.17	5.90	5.67	5.86
Delaware	6.27	5.77	6.14	5.95	6.34	6.40	6.83	6.88
District of Columbia	8.30	7.09	7.71	7.72	7.63	7.07	5.65	5.60
Florida	6.56	6.47	6.49	6.44	6.42	6.39	6.40	6.46
Georgia	6.44	5.82	6.26	5.66	6.01	5.80	5.81	6.50
Hawaii	14.79	14.52	15.25	15.43	15.48	14.74	15.06	15.46
Idaho	4.30	4.55	4.33	4.62	4.85	4.90	4.91	4.92
Illinois	5.89	4.91	5.19	4.82	5.22	6.24	7.64	7.07
Indiana	5.14	R4.58	R4.56	4.63	4.98	5.87	5.84	5.84
Iowa	4.96	4.62	5.19	5.13	5.36	5.65	8.76	6.02
Kansas	5.98	4.79	5.45	5.07	5.21	5.06	6.28	4.00
Kentucky	5.64	5.04	5.62	5.45	5.74	5.89	6.28	5.76
Louisiana	6.98	6.12	7.44	6.57	6.14	5.88	6.10	6.62
Maine	7.75	7.14	7.87	7.58	6.17	6.55	6.57	7.96
Maryland	NA	5.90	6.42	5.53	5.71	6.09	6.46	6.16
Massachusetts	NA	6.77	7.85	7.25	4.75	4.84	4.83	5.02
Michigan	4.99	4.69	4.91	4.79	5.18	5.45	6.02	5.85
Minnesota	6.02	4.62	5.66	4.58	3.98	4.26	4.95	4.88
Mississippi	5.61	R5.11	R5.61	4.76	4.22	4.16	4.05	4.23
Missouri	6.58	5.34	5.81	5.30	5.34	5.92	6.35	6.00
Montana	4.46	4.72	4.56	4.76	5.15	5.36	5.41	5.26
Nebraska	6.00	R4.47	5.38	R4.03	R4.93	R3.35	R4.37	R4.16
Nevada	4.97	4.91	4.88	4.89	5.13	5.14	5.10	4.92
New Hampshire	8.41	6.76	7.75	7.78	5.86	6.14	6.23	6.29
New Jersey	6.70	7.04	7.26	6.47	5.11	4.90	5.12	5.16
New Mexico	5.34	3.18	3.18	2.99	3.23	3.96	3.24	2.67
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	7.52	6.15	6.71	6.65	6.33	6.37	6.35	7.11
North Dakota	4.24	3.96	4.08	3.58	3.80	4.22	4.93	6.39
Ohio	6.41	5.38	5.81	6.14	6.42	6.66	6.87	6.28
Oklahoma	6.40	4.65	5.00	4.76	5.03	5.06	5.07	4.65
Oregon	4.56	4.86	4.67	4.84	5.11	5.13	5.11	5.11
Pennsylvania	7.07	6.38	6.75	6.46	6.78	7.39	7.26	7.24
Rhode Island	7.88	7.28	7.71	7.60	8.04	7.76	7.76	7.92
South Carolina	7.46	6.18	7.01	6.37	5.66	5.76	5.74	5.69
South Dakota	4.61	4.21	4.34	4.20	4.07	5.22	8.54	5.68
Tennessee	6.51	5.75	5.72	5.34	5.55	6.10	6.45	5.96
Texas	NA	NA	5.47	4.65	NA	4.44	NA	3.92
Utah	NA	3.38	3.69	3.80	2.96	3.07	3.32	3.25
Vermont	5.24	5.23	5.19	5.10	5.10	5.18	5.43	5.44
Virginia	6.97	5.85	6.65	5.86	6.00	6.38	6.56	6.64
Washington	4.65	4.79	4.74	4.77	4.86	5.01	5.08	5.14
West Virginia	6.09	6.02	5.84	6.24	5.81	6.25	4.84	4.66
Wisconsin	NA	4.77	5.71	4.97	3.72	4.01	4.38	4.71
Wyoming	NA	R3.44	2.89	R2.44	R3.50	R3.81	R3.66	R3.87
Total	6.06	R5.37	5.74	R5.37	R5.29	R5.43	R5.53	R5.43

See footnotes at end of table.

Table 21. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1996						1995	
	June	May	April	March	February	January	Total	December
Alabama	6.98	6.40	6.07	6.20	5.77	5.62	5.80	5.48
Alaska	2.19	2.24	2.37	2.34	2.43	2.33	2.27	2.34
Arizona	4.96	4.92	4.97	4.94	4.95	4.90	5.25	4.91
Arkansas	5.11	4.84	4.47	4.34	4.37	4.31	4.09	3.89
California	5.48	5.61	6.05	6.68	6.26	6.82	6.21	7.01
Colorado	3.69	3.54	3.59	3.73	3.59	3.61	4.23	3.78
Connecticut	6.45	7.25	7.72	7.69	8.29	7.37	7.57	8.53
Delaware	6.77	6.02	5.48	5.60	5.30	5.29	5.28	4.97
District of Columbia	6.08	6.04	6.63	8.41	7.83	6.57	6.04	6.01
Florida	6.54	6.63	6.62	6.68	6.39	6.20	5.33	5.66
Georgia	6.99	7.00	5.90	5.41	5.62	5.16	5.20	4.72
Hawaii	14.76	14.53	13.69	13.95	13.50	12.92	13.00	13.46
Idaho	4.77	4.77	4.66	4.42	4.41	4.45	4.87	4.69
Illinois	6.66	6.18	4.99	4.74	4.30	4.06	4.42	4.00
Indiana	5.69	5.27	4.94	4.36	4.18	4.04	4.39	3.93
Iowa	5.15	4.48	3.87	4.13	4.07	4.01	4.14	4.05
Kansas	4.55	4.74	4.46	4.65	4.60	4.44	3.93	4.12
Kentucky	5.57	5.72	4.87	4.54	4.49	4.45	4.60	4.38
Louisiana	6.09	6.53	6.39	5.45	5.33	6.07	5.14	5.85
Maine	6.44	7.22	7.22	7.32	7.32	6.51	6.51	6.48
Maryland	6.16	5.95	5.54	5.97	6.03	5.57	5.06	5.16
Massachusetts	4.74	4.89	7.35	7.39	7.50	7.51	6.59	7.25
Michigan	5.52	4.72	4.51	4.46	4.46	4.41	4.46	4.39
Minnesota	4.67	4.52	4.43	4.37	4.37	4.44	3.98	4.24
Mississippi	4.24	12.58	4.74	4.73	4.43	4.87	4.25	4.68
Missouri	5.61	5.39	5.13	5.26	5.17	4.96	4.39	4.76
Montana	4.83	4.74	4.60	4.61	4.58	4.63	4.92	4.65
Nebraska	[R]4.26	[R]5.40	[R]4.34	[R]4.37	[R]4.53	[R]4.20	3.96	NA
Nevada	4.92	4.93	4.90	4.86	4.84	4.80	5.39	4.88
New Hampshire	5.91	5.76	5.79	7.00	6.94	6.67	6.44	6.70
New Jersey	5.24	5.59	6.19	6.75	6.67	10.42	5.76	6.12
New Mexico	2.60	3.93	3.19	3.38	3.40	2.99	3.74	2.94
New York	NA	NA	NA	NA	NA	NA	6.09	6.16
North Carolina	5.65	6.22	5.83	6.34	6.10	5.39	5.24	5.19
North Dakota	4.49	3.88	3.89	3.78	3.87	3.84	3.90	3.77
Ohio	5.94	5.60	5.00	5.02	5.07	4.68	4.92	4.69
Oklahoma	4.95	4.93	4.24	4.60	4.46	4.48	4.47	4.47
Oregon	4.85	4.83	4.94	4.83	4.82	4.83	5.23	4.98
Pennsylvania	6.91	6.62	6.62	6.07	6.05	5.89	6.28	5.60
Rhode Island	7.53	7.12	6.07	7.29	7.26	7.04	6.41	6.94
South Carolina	5.27	5.38	6.05	6.49	6.66	6.22	6.09	5.78
South Dakota	5.55	4.72	4.36	3.47	4.04	3.54	3.99	3.91
Tennessee	6.13	6.03	6.02	5.99	5.81	5.26	5.18	5.02
Texas	3.90	3.90	3.98	4.32	4.32	4.45	4.09	4.31
Utah	3.34	3.01	2.86	3.69	3.06	3.59	3.65	3.92
Vermont	5.55	5.37	5.23	5.18	5.23	5.27	5.43	5.13
Virginia	6.17	5.10	5.58	5.37	5.86	5.46	5.08	4.92
Washington	4.75	4.76	4.78	4.74	4.74	4.73	5.00	4.89
West Virginia	8.05	6.81	6.32	6.09	6.02	6.00	6.08	6.09
Wisconsin	4.25	4.12	4.79	4.73	4.65	4.78	4.50	4.72
Wyoming	[R]3.85	[R]3.73	[R]3.78	[R]3.83	[R]3.56	[R]3.80	4.23	NA
Total	[R]5.36	[R]5.36	[R]5.28	[R]5.30	[R]5.24	[R]5.29	5.05	5.00

See footnotes at end of table.

Table 21. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1995							
	November	October	September	August	July	June	May	April
Alabama	5.53	5.90	5.93	5.96	5.90	5.94	5.98	6.16
Alaska	2.23	2.08	2.13	2.04	2.09	2.18	2.23	2.32
Arizona	5.10	5.09	5.04	5.23	5.26	5.28	5.37	5.41
Arkansas	4.27	4.32	4.24	4.18	4.17	4.17	4.29	3.94
California	4.67	6.04	6.00	6.20	5.68	5.98	5.56	5.98
Colorado	3.87	4.27	4.76	4.70	4.56	4.42	4.34	4.29
Connecticut	7.48	6.37	6.50	6.20	7.07	7.05	7.10	7.83
Delaware	5.64	5.38	5.64	5.86	5.32	5.64	5.39	5.31
District of Columbia	6.40	5.96	6.03	5.47	5.35	5.53	6.10	6.38
Florida	5.43	5.35	5.30	5.34	5.32	5.35	5.30	5.29
Georgia	4.21	4.96	4.97	4.98	5.07	5.17	5.00	5.87
Hawaii	13.19	13.17	13.22	12.99	13.37	13.07	12.90	12.96
Idaho	5.22	4.96	5.01	5.06	5.15	5.15	4.52	5.14
Illinois	4.11	4.23	5.23	5.01	5.35	5.16	5.16	4.42
Indiana	3.75	4.08	4.60	4.90	4.98	5.07	4.84	4.50
Iowa	4.10	4.04	4.84	5.56	5.41	5.16	4.67	4.01
Kansas	4.07	3.56	3.61	3.70	3.81	3.98	4.07	3.91
Kentucky	4.13	4.55	4.69	5.25	4.70	5.26	4.78	4.77
Louisiana	5.50	5.45	5.21	4.82	5.16	4.58	5.32	4.94
Maine	6.58	5.92	6.05	6.17	6.11	6.00	5.91	6.90
Maryland	5.00	5.18	4.85	5.23	5.83	5.30	4.89	4.94
Massachusetts	6.57	4.73	5.08	5.09	5.19	4.85	4.83	7.13
Michigan	4.49	4.71	5.26	5.59	5.62	5.26	4.62	4.30
Minnesota	3.95	3.94	3.91	3.98	2.68	4.18	4.05	3.70
Mississippi	4.50	2.83	2.61	3.80	4.27	4.41	4.54	4.54
Missouri	4.69	4.52	4.75	4.87	4.88	4.76	4.02	4.10
Montana	4.78	5.09	5.45	5.50	5.29	5.15	4.94	4.91
Nebraska	NA	NA	NA	3.74	3.75	3.89	5.16	4.02
Nevada	5.31	5.59	5.63	5.70	5.65	5.56	5.45	5.42
New Hampshire	6.48	5.66	5.95	6.21	6.03	6.04	5.38	5.47
New Jersey	6.81	5.57	4.86	5.22	5.33	5.18	5.18	5.26
New Mexico	3.00	3.39	3.54	3.46	4.11	3.61	4.13	3.96
New York	5.51	5.46	5.73	5.74	5.86	6.43	6.45	6.34
North Carolina	5.18	5.11	5.11	5.15	5.19	5.10	5.06	5.15
North Dakota	3.74	4.42	4.49	4.72	4.66	4.49	4.11	3.80
Ohio	4.66	5.05	5.33	5.27	5.36	5.34	4.86	4.91
Oklahoma	4.33	4.25	4.31	4.44	4.52	4.45	4.51	4.55
Oregon	5.34	5.42	5.55	5.55	5.46	5.04	5.09	5.24
Pennsylvania	5.62	6.22	6.98	7.07	7.03	7.05	6.71	6.49
Rhode Island	5.94	6.35	5.99	6.32	6.02	6.51	6.07	7.23
South Carolina	5.77	5.67	5.60	5.64	5.73	5.97	5.79	6.41
South Dakota	3.85	3.68	5.01	6.24	5.84	5.17	4.27	3.69
Tennessee	4.88	5.16	5.30	5.21	5.50	5.19	4.96	5.39
Texas	4.17	3.99	3.94	3.51	3.62	3.88	3.99	3.95
Utah	3.91	3.24	3.40	3.52	3.49	3.42	3.26	3.16
Vermont	5.23	5.39	5.45	5.70	5.23	5.81	5.68	5.51
Virginia	4.52	5.24	5.18	5.08	5.43	5.40	5.08	4.94
Washington	4.89	4.95	4.91	4.95	5.05	4.85	5.04	5.06
West Virginia	6.04	5.98	6.07	6.08	6.39	6.51	6.54	5.93
Wisconsin	4.43	3.75	3.56	4.13	4.28	4.24	4.27	4.53
Wyoming	NA	NA	NA	4.34	4.28	4.22	4.27	4.27
Total	4.77	4.82	4.98	4.99	5.03	5.16	5.04	5.08

R = Revised Data.
NA = Not Available.

Notes: Data for 1995 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet)

State	1997	1996						
	January	Total	December	November	October	September	August	July
Alabama	4.73	3.72	4.56	3.76	3.30	3.12	3.62	3.57
Alaska	1.55	1.52	1.54	1.50	1.51	1.48	1.54	1.55
Arizona	4.32	3.86	3.87	3.86	3.84	3.82	3.74	3.64
Arkansas	4.01	3.06	3.93	3.39	2.75	2.74	2.77	3.03
California	5.40	3.69	4.26	3.92	3.29	3.53	3.48	3.54
Colorado	NA	2.04	3.63	2.90	1.92	1.70	1.76	1.72
Connecticut	6.11	4.80	5.81	4.95	4.00	3.98	3.83	4.02
Delaware	5.29	4.38	5.00	4.77	4.68	4.64	4.77	4.73
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.69	4.30	4.66	4.39	4.05	3.96	4.19	4.22
Georgia	6.45	4.59	5.09	3.93	4.33	2.86	4.24	6.99
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	2.78	3.02	2.63	2.73	3.00	2.99	2.98	3.18
Illinois	6.49	4.14	4.18	4.12	4.20	5.07	5.01	4.84
Indiana	4.19	[R]3.42	[R]3.71	3.48	3.51	3.94	3.94	3.68
Iowa	3.94	3.61	3.94	3.79	3.43	3.91	3.54	4.41
Kansas	4.36	2.32	4.23	3.28	2.28	2.86	2.51	2.56
Kentucky	4.89	3.87	4.66	3.89	3.68	3.61	3.85	3.71
Louisiana	4.19	NA	3.58	NA	NA	2.20	2.35	2.76
Maine	6.95	5.31	6.71	6.67	4.11	4.03	4.03	4.22
Maryland	NA	5.49	4.66	6.69	7.92	6.28	7.50	6.45
Massachusetts	NA	5.45	7.10	5.62	4.22	3.81	3.77	4.05
Michigan	4.16	4.10	4.17	4.18	4.34	4.30	4.47	4.57
Minnesota	4.69	2.95	4.23	3.18	2.43	2.35	2.96	2.72
Mississippi	4.45	[R]3.44	[R]4.38	3.52	3.53	2.98	3.15	3.37
Missouri	5.35	4.35	4.86	4.03	3.76	4.14	4.29	4.25
Montana	4.79	4.88	4.87	4.95	5.02	5.04	5.16	5.09
Nebraska	5.16	3.30	4.32	3.63	2.76	2.87	3.41	3.21
Nevada	9.50	4.90	4.67	4.68	5.01	5.10	5.15	4.80
New Hampshire	7.94	4.87	6.93	5.20	7.74	3.53	3.39	3.51
New Jersey	4.89	[R]3.77	4.47	3.38	2.99	3.39	3.09	[R]3.44
New Mexico	3.01	2.63	2.50	2.63	2.75	3.36	2.55	1.66
New York	NA	4.92	5.07	4.69	4.36	4.31	4.61	4.64
North Carolina	5.63	4.35	5.13	4.63	4.04	4.02	3.81	3.86
North Dakota	4.39	3.07	3.96	2.40	2.32	2.75	3.02	3.38
Ohio	5.52	4.66	3.13	5.58	5.43	5.06	5.33	5.56
Oklahoma	5.41	3.11	3.66	3.13	3.00	3.32	3.10	3.21
Oregon	3.25	3.23	3.31	3.38	3.10	3.18	3.23	3.32
Pennsylvania	5.25	4.19	4.01	4.32	4.09	4.08	3.98	3.93
Rhode Island	5.64	4.61	9.56	4.58	3.67	3.69	3.79	4.26
South Carolina	4.74	3.74	4.52	3.98	3.25	3.26	3.44	3.53
South Dakota	4.99	2.68	4.51	3.52	3.46	4.05	3.85	3.52
Tennessee	4.80	3.80	4.23	3.63	3.30	3.77	3.90	3.58
Texas	4.11	2.61	4.03	3.06	2.07	2.09	2.55	2.77
Utah	NA	2.03	2.20	2.14	1.90	1.93	1.96	1.90
Vermont	3.32	3.43	3.17	3.19	3.43	3.16	3.30	3.36
Virginia	3.56	4.28	4.43	3.77	4.05	4.33	4.42	3.96
Washington	4.36	2.70	3.85	2.81	2.55	1.95	3.88	2.38
West Virginia	3.44	2.87	3.06	3.17	2.80	2.92	2.50	2.70
Wisconsin	NA	3.75	5.10	4.37	2.94	3.02	3.36	3.52
Wyoming	NA	[R]3.01	3.12	[R]3.19	[R]3.16	[R]3.06	[R]3.02	[R]2.97
Total	4.58	3.34	4.17	3.58	2.86	2.83	3.06	3.19

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1996						1995	
	June	May	April	March	February	January	Total	December
Alabama	3.44	3.38	3.68	3.84	4.10	3.90	2.96	3.16
Alaska	1.54	1.52	1.51	1.52	1.50	1.50	1.45	1.42
Arizona	3.90	3.90	3.90	3.92	3.94	3.91	3.81	4.68
Arkansas	2.92	2.93	2.95	3.04	2.95	3.09	2.78	2.99
California	3.29	3.28	3.61	3.69	3.89	4.35	3.70	3.89
Colorado	1.71	1.75	1.70	1.91	1.72	1.80	2.86	NA
Connecticut	4.07	4.21	4.69	5.21	5.68	6.52	4.39	5.41
Delaware	4.35	4.85	4.04	3.93	4.15	3.79	2.94	3.78
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.24	4.17	4.62	4.26	4.57	4.16	3.28	2.94
Georgia	5.67	4.68	4.28	4.72	4.79	4.84	3.55	3.73
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	3.04	3.09	3.00	3.18	3.17	3.47	3.67	3.93
Illinois	5.37	4.58	3.27	4.66	3.84	3.59	3.57	3.32
Indiana	3.85	2.49	3.66	3.37	3.53	3.04	3.41	3.54
Iowa	4.26	3.55	3.08	3.35	3.39	3.20	3.23	1.77
Kansas	2.65	2.52	2.27	2.82	2.49	0.78	2.23	2.55
Kentucky	3.59	3.73	3.75	3.82	3.85	3.93	3.26	3.51
Louisiana	2.69	2.54	2.82	3.01	2.75	2.77	1.82	2.27
Maine	4.02	5.11	6.27	6.38	6.50	5.60	4.46	5.43
Maryland	6.17	6.15	5.47	5.19	5.89	4.17	3.21	1.24
Massachusetts	3.80	4.15	5.91	6.52	7.00	6.89	4.43	5.05
Michigan	4.12	3.93	3.92	4.06	4.05	4.04	3.62	3.58
Minnesota	2.55	2.77	2.72	2.90	3.11	2.98	2.45	2.55
Mississippi	3.17	3.09	3.41	3.51	3.20	3.75	2.71	3.46
Missouri	3.89	3.98	4.22	4.92	4.58	4.31	3.48	4.19
Montana	5.01	4.65	4.84	4.74	4.72	4.94	4.87	4.86
Nebraska	3.09	2.93	3.14	3.11	3.20	3.20	2.79	2.91
Nevada	4.86	4.90	4.91	4.96	4.98	4.93	5.34	4.92
New Hampshire	3.43	3.62	4.27	5.43	6.08	5.23	3.80	4.97
New Jersey	3.42	3.66	4.13	4.19	4.83	4.11	3.11	3.53
New Mexico	2.06	7.53	3.30	5.53	3.74	2.30	2.83	1.71
New York	4.54	4.81	5.29	5.14	5.54	5.07	4.69	4.94
North Carolina	3.63	3.83	3.89	4.60	5.02	4.40	3.56	4.03
North Dakota	3.05	3.22	3.34	3.14	3.34	3.44	2.90	3.18
Ohio	4.55	4.73	4.78	4.70	4.38	4.51	3.93	3.91
Oklahoma	3.37	2.90	3.21	2.90	2.87	2.82	2.27	2.67
Oregon	3.25	3.21	3.14	3.27	3.25	3.19	3.41	3.25
Pennsylvania	4.08	4.05	4.24	4.24	4.37	4.41	3.90	3.56
Rhode Island	3.86	4.08	4.42	5.58	5.40	4.68	4.09	4.83
South Carolina	3.35	3.39	3.74	3.97	4.20	4.35	3.11	3.64
South Dakota	3.98	3.39	3.33	1.48	3.28	3.08	3.44	3.20
Tennessee	3.69	3.76	3.98	3.93	4.29	3.48	3.34	3.38
Texas	2.63	2.40	2.54	2.36	2.60	2.45	1.89	2.17
Utah	1.95	1.98	2.00	2.27	1.75	2.26	2.34	2.07
Vermont	3.54	3.73	3.74	3.53	3.62	3.45	3.39	2.98
Virginia	4.13	3.81	5.13	4.31	4.61	4.52	3.35	3.50
Washington	2.82	2.50	2.49	2.56	2.66	2.41	2.74	2.98
West Virginia	2.82	2.75	2.97	2.99	2.93	2.70	2.60	2.77
Wisconsin	3.34	3.29	3.74	3.69	3.64	3.83	2.96	3.57
Wyoming	[R]2.85	[R]3.15	3.09	[R]3.11	[R]2.54	[R]3.14	3.18	NA
Total	3.12	3.07	3.35	[R]3.51	3.54	3.38	2.71	3.07

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1997

(Dollars per Thousand Cubic Feet) — Continued

State	1995							
	November	October	September	August	July	June	May	April
Alabama	3.05	2.83	2.99	2.72	2.55	2.91	3.02	2.89
Alaska	1.43	1.44	1.43	1.45	1.48	1.47	1.45	1.46
Arizona	3.99	3.95	3.97	4.17	3.98	3.36	3.36	3.15
Arkansas	2.84	2.52	2.38	2.47	2.78	2.75	2.76	2.79
California	2.71	3.94	3.59	3.63	2.99	3.39	3.40	3.50
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	4.41	3.79	3.62	3.72	3.66	3.76	3.94	4.47
Delaware	2.88	2.85	2.74	2.60	2.76	2.81	2.70	2.83
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.44	3.37	3.34	3.16	3.32	3.33	3.29	3.22
Georgia	3.27	2.60	3.71	4.94	3.97	3.54	3.49	3.35
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	3.82	3.34	2.79	3.51	3.68	3.79	3.65	3.79
Illinois	3.22	3.39	3.60	3.80	3.99	2.68	2.99	3.49
Indiana	3.28	3.32	3.54	3.43	3.81	3.99	4.22	3.97
Iowa	3.12	3.25	3.57	3.84	3.90	3.18	3.31	2.95
Kansas	2.39	2.21	2.21	2.05	2.04	2.20	2.22	2.10
Kentucky	3.18	3.11	3.03	2.85	3.16	3.14	3.24	3.12
Louisiana	1.90	1.82	1.69	1.66	1.85	1.88	1.82	1.71
Maine	4.54	3.74	3.70	3.79	3.80	3.77	3.62	4.49
Maryland	4.83	2.61	2.97	2.97	3.31	3.00	3.59	3.57
Massachusetts	4.70	3.80	3.52	3.12	3.23	2.03	4.12	5.45
Michigan	3.63	3.71	3.75	3.99	4.02	3.84	3.69	3.49
Minnesota	2.48	2.41	2.13	2.21	2.11	2.07	2.23	2.32
Mississippi	3.01	1.50	1.47	2.64	2.78	2.99	2.80	2.88
Missouri	3.58	3.02	3.07	3.14	3.29	3.31	3.10	3.30
Montana	4.88	4.98	4.99	5.06	5.02	4.98	4.85	4.82
Nebraska	2.38	2.54	2.79	2.96	2.68	2.63	2.72	2.72
Nevada	5.15	5.23	5.29	5.30	5.33	5.41	5.51	5.42
New Hampshire	3.79	2.99	2.94	2.82	2.92	3.22	3.11	3.52
New Jersey	3.22	2.78	2.60	2.45	2.72	2.66	2.79	3.03
New Mexico	2.21	2.05	2.34	2.46	3.47	4.40	7.82	3.70
New York	4.62	4.08	3.95	3.80	3.97	4.26	4.37	4.77
North Carolina	3.66	3.11	3.29	3.16	3.19	3.13	3.12	3.16
North Dakota	2.94	2.79	2.69	2.68	2.79	2.76	2.80	2.78
Ohio	3.99	3.36	3.80	3.79	3.61	3.56	3.44	3.95
Oklahoma	2.50	1.91	1.81	2.04	1.81	1.98	2.13	2.56
Oregon	3.46	3.31	3.43	3.39	3.50	3.44	3.46	3.38
Pennsylvania	3.44	3.56	9.31	3.29	3.48	3.54	3.56	3.31
Rhode Island	3.33	3.85	3.54	3.39	3.63	3.49	3.65	4.68
South Carolina	3.26	2.96	2.87	2.87	2.98	2.91	2.93	2.92
South Dakota	2.76	4.05	4.26	5.45	5.07	3.84	3.28	2.92
Tennessee	3.16	3.08	3.01	3.13	3.03	3.08	2.97	3.46
Texas	1.81	1.72	1.67	1.43	1.60	1.75	1.74	1.65
Utah	2.20	2.04	2.08	2.03	2.06	2.36	2.39	2.49
Vermont	3.27	3.34	3.72	3.42	3.68	3.39	3.33	3.40
Virginia	2.83	4.00	2.43	1.89	2.65	3.69	3.56	3.61
Washington	2.84	2.57	2.79	2.33	2.60	2.72	2.89	2.66
West Virginia	2.92	2.60	2.43	2.32	2.44	2.56	2.48	2.54
Wisconsin	3.16	2.40	2.24	2.34	2.20	2.65	3.72	2.80
Wyoming	NA	NA	NA	2.96	2.95	3.14	3.16	3.40
Total	2.68	2.44	2.42	2.26	2.34	2.44	2.54	2.57

R = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Data for 1995 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1994-1996

(Dollars per Thousand Cubic Feet)

State	1996							
	Total	December	November	October	September	August	July	June
Alabama	2.95	4.32	3.16	2.27	2.14	2.66	3.04	2.71
Alaska	1.44	1.64	1.63	1.73	1.71	1.66	1.58	1.47
Arizona	3.03	7.53	4.76	2.53	2.98	2.61	3.09	3.33
Arkansas	2.52	3.88	2.62	1.36	1.89	2.47	2.57	2.40
California	2.74	4.55	3.31	2.58	2.56	2.67	2.35	2.44
Colorado	2.08	4.30	2.93	2.47	1.54	1.72	2.32	1.52
Connecticut	2.81	4.97	3.59	2.78	2.30	2.78	3.01	2.69
Delaware	3.13	4.06	3.65	2.32	2.32	2.35	3.39	3.01
District of Columbia	NA	—	—	—	—	—	—	—
Florida	3.12	4.75	3.38	2.56	2.59	2.99	3.28	3.09
Georgia	2.88	6.28	2.50	3.08	2.72	2.51	2.23	3.25
Hawaii	NA	—	—	—	—	—	—	—
Idaho	NA	—	—	—	—	—	—	—
Illinois	2.62	3.82	3.10	2.12	1.98	2.25	2.70	2.60
Indiana	3.48	4.80	3.86	3.38	2.99	2.95	3.14	3.32
Iowa	3.23	3.77	3.45	2.95	1.80	2.87	2.83	2.55
Kansas	2.25	4.10	2.62	1.88	1.81	2.35	2.19	2.16
Kentucky	3.49	4.64	3.51	2.82	2.59	3.05	3.36	3.15
Louisiana	2.94	4.37	3.12	2.25	2.16	2.64	2.96	2.72
Maine	NA	—	—	—	—	—	—	—
Maryland	3.11	5.92	4.02	2.65	2.85	2.49	3.25	3.12
Massachusetts	3.09	4.85	3.85	2.70	2.33	2.71	3.37	3.03
Michigan	0.76	0.55	0.73	0.55	0.90	0.72	0.73	0.88
Minnesota	2.18	2.32	2.19	2.14	2.14	2.10	2.14	2.09
Mississippi	2.78	4.27	3.23	2.10	2.00	2.52	2.85	2.64
Missouri	2.58	4.90	2.61	2.38	2.24	2.41	2.63	2.50
Montana	2.89	1.81	1.66	0.65	6.59	6.79	3.49	4.69
Nebraska	2.07	4.37	2.85	1.85	1.81	2.16	2.27	1.74
Nevada	2.11	2.19	2.37	2.70	1.96	2.20	1.83	1.98
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.95	5.00	3.16	2.36	2.42	2.79	3.15	3.14
New Mexico	2.31	3.80	2.94	2.17	1.94	2.33	2.01	1.99
New York	2.94	4.22	3.30	2.37	2.26	2.74	3.06	2.89
North Carolina	4.57	4.41	4.20	2.55	28.03	3.31	3.51	2.93
North Dakota	2.93	2.81	3.92	2.94	—	3.32	2.71	2.81
Ohio	3.44	4.27	3.92	2.96	2.72	2.70	3.18	3.51
Oklahoma	2.99	4.43	3.61	2.92	2.42	2.64	2.70	2.72
Oregon	1.33	2.01	1.42	1.42	1.27	1.24	1.25	—
Pennsylvania	2.85	4.57	3.31	2.70	1.67	2.63	3.52	2.74
Rhode Island	2.29	3.14	2.34	1.81	1.78	2.32	2.27	2.13
South Carolina	4.56	5.08	4.47	5.32	4.01	4.67	3.94	3.69
South Dakota	—	—	—	—	—	—	2.36	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.51	3.80	2.82	2.23	2.10	2.45	2.63	2.46
Utah	—	—	—	—	1.50	1.67	1.57	2.39
Vermont	3.22	4.42	3.37	2.68	2.70	3.15	3.45	3.17
Virginia	2.98	3.42	2.04	3.77	2.93	2.83	3.36	3.14
Washington	4.98	4.75	5.03	4.35	4.01	4.98	6.14	5.52
West Virginia	2.99	2.94	2.87	3.69	—	3.28	3.35	3.31
Wisconsin	3.04	4.29	3.48	2.55	2.38	2.87	2.97	2.56
Wyoming	12.59	26.41	[R]17.57	[R]17.64	[R]3.19	[R]7.72	[R]3.19	[R]6.99
Total	2.68	3.98	3.03	2.37	2.26	[R]2.57	2.69	2.59

See footnotes at end of table.

Table 23. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1994-1996

(Dollars per Thousand Cubic Feet) — Continued

State	1996					1995		
	May	April	March	February	January	Total	December	November
Alabama	2.59	3.10	3.29	2.82	3.71	2.01	2.68	2.19
Alaska	1.04	1.16	1.22	1.29	1.32	1.29	1.24	1.30
Arizona	4.43	2.30	2.31	3.19	2.71	1.77	2.35	1.94
Arkansas	2.30	2.54	2.71	7.11	2.02	1.74	2.68	1.80
California	2.60	2.53	2.58	3.03	2.69	2.28	2.57	2.32
Colorado	1.85	2.06	1.79	1.75	1.80	1.74	1.90	1.73
Connecticut	2.62	2.79	—	—	—	2.01	—	2.10
Delaware	3.19	4.14	2.89	4.63	4.63	2.34	3.70	2.64
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.91	3.18	3.50	2.83	3.87	2.26	3.07	2.43
Georgia	3.80	5.05	5.18	4.90	7.30	2.79	4.55	3.67
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.43	3.03	3.12	3.24	3.19	1.71	2.48	2.04
Indiana	3.21	3.40	3.85	3.98	3.39	2.49	3.01	2.72
Iowa	2.64	3.82	5.45	3.44	3.36	2.72	2.94	3.02
Kansas	2.13	2.45	2.18	2.46	2.28	1.58	2.06	1.58
Kentucky	3.78	3.40	3.72	3.57	3.96	3.01	3.14	2.57
Louisiana	2.63	2.99	3.25	4.04	3.72	1.88	2.72	2.08
Maine	—	—	—	—	—	—	—	—
Maryland	3.13	3.97	5.72	6.54	6.01	2.24	5.16	2.80
Massachusetts	3.08	3.62	4.17	3.70	6.47	2.06	3.92	2.59
Michigan	0.90	0.71	0.83	0.90	0.65	0.73	0.61	0.71
Minnesota	2.36	2.63	2.43	2.13	2.10	1.77	2.11	2.19
Mississippi	2.49	2.95	3.50	8.16	4.08	1.78	2.76	1.96
Missouri	2.42	2.20	3.37	3.12	3.11	1.69	2.38	2.10
Montana	5.95	8.98	20.05	3.68	1.86	3.84	3.84	1.40
Nebraska	1.58	1.94	2.39	2.19	1.96	1.65	1.91	1.67
Nevada	1.90	2.08	2.14	2.22	1.99	1.71	2.02	1.80
New Hampshire	—	—	—	—	—	1.86	—	—
New Jersey	3.37	3.50	3.67	2.85	2.76	2.18	3.12	2.63
New Mexico	2.04	2.17	2.23	2.16	2.07	1.57	1.83	1.74
New York	2.80	3.35	3.32	3.91	4.49	2.13	3.10	2.58
North Carolina	2.66	3.23	—	—	3.07	2.40	—	3.04
North Dakota	2.91	—	—	—	3.58	3.71	3.58	3.59
Ohio	2.99	3.48	3.74	3.54	3.94	2.34	3.04	2.28
Oklahoma	2.95	3.15	3.35	4.13	3.13	2.34	2.88	2.78
Oregon	—	—	—	—	—	1.31	1.53	1.73
Pennsylvania	3.38	2.64	3.61	5.41	4.57	2.04	2.63	2.72
Rhode Island	2.10	2.36	2.37	2.45	2.38	1.90	2.06	1.70
South Carolina	4.75	4.44	4.72	4.35	4.23	1.64	3.70	3.55
South Dakota	—	—	—	—	—	1.58	2.39	2.02
Tennessee	—	—	—	—	—	—	—	—
Texas	2.35	2.48	2.35	2.60	2.48	1.93	2.42	2.09
Utah	—	—	—	20.25	—	2.26	—	2.40
Vermont	—	2.72	—	—	3.06	1.95	1.96	1.85
Virginia	3.61	1.51	3.09	1.99	2.41	2.67	3.32	2.44
Washington	4.05	4.22	5.51	4.90	4.98	4.60	4.21	3.99
West Virginia	2.82	3.00	2.70	2.75	5.00	3.58	3.09	4.92
Wisconsin	2.71	3.01	4.19	2.88	2.64	2.23	2.65	2.51
Wyoming	[R]3.44	[R]30.24	[R]18.59	[R]23.99	[R]6.80	8.32	16.25	12.28
Total	2.52	2.68	2.70	3.06	2.88	2.02	2.58	2.22

See footnotes at end of table.

Table 23. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1994-1996

(Dollars per Thousand Cubic Feet) — Continued

State	1995							
	October	September	August	July	June	May	April	March
Alabama	2.02	1.94	1.75	1.86	2.07	2.05	1.95	1.84
Alaska	1.28	1.29	1.13	1.22	1.33	1.43	1.28	1.39
Arizona	1.84	1.92	1.59	1.63	2.31	2.48	1.56	1.71
Arkansas	1.83	1.68	1.63	1.62	2.01	1.88	1.63	1.41
California	2.37	2.08	2.02	2.18	2.56	2.45	2.28	2.36
Colorado	1.82	1.90	1.72	1.48	1.91	1.79	1.68	1.61
Connecticut	1.85	1.80	1.82	1.95	2.11	2.10	2.07	1.99
Delaware	2.13	2.06	2.00	2.00	2.40	2.42	2.18	2.19
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.29	2.22	2.11	2.20	2.39	2.36	2.16	1.96
Georgia	3.14	3.06	2.76	2.62	2.78	2.92	2.99	3.00
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	1.78	1.68	1.59	1.53	1.64	1.71	1.64	1.51
Indiana	2.78	2.49	2.31	2.36	2.38	2.33	2.88	2.31
Iowa	2.73	2.71	2.52	2.38	2.61	3.31	2.73	3.01
Kansas	1.50	1.57	1.49	1.43	1.70	1.85	1.64	1.51
Kentucky	2.87	2.50	2.42	2.54	2.90	4.08	3.89	2.95
Louisiana	1.93	1.85	1.67	1.78	1.95	1.91	1.78	1.69
Maine	—	—	—	—	—	—	—	—
Maryland	2.51	2.03	2.10	2.16	2.38	2.64	2.64	2.54
Massachusetts	2.02	1.93	1.81	1.88	1.97	2.09	2.07	2.00
Michigan	0.43	0.77	1.09	0.79	0.48	0.48	0.55	0.86
Minnesota	1.60	1.67	1.69	1.65	1.72	1.78	1.62	1.74
Mississippi	1.90	1.73	1.60	1.64	1.85	1.84	1.74	1.59
Missouri	1.88	1.91	1.71	1.64	1.62	1.62	1.56	1.43
Montana	7.42	2.07	1.55	7.37	2.30	4.66	25.80	12.45
Nebraska	1.50	1.51	1.54	1.50	1.96	1.94	1.60	1.90
Nevada	1.82	1.75	1.53	1.56	1.77	1.80	1.85	1.51
New Hampshire	1.93	1.81	1.71	1.79	1.98	1.98	1.98	—
New Jersey	2.26	2.12	2.09	2.03	2.54	2.44	1.90	1.74
New Mexico	1.65	1.64	1.44	1.41	1.53	1.57	1.50	1.44
New York	2.03	1.93	1.89	1.94	2.12	2.20	2.14	2.08
North Carolina	2.07	2.00	2.45	2.43	2.16	2.17	2.50	2.89
North Dakota	—	4.07	—	3.95	3.89	—	3.77	3.68
Ohio	2.66	2.16	2.38	2.09	2.13	2.18	2.47	2.28
Oklahoma	2.95	2.16	2.07	2.09	2.42	2.46	2.28	2.27
Oregon	1.42	1.01	0.94	0.93	—	1.13	1.25	1.15
Pennsylvania	1.90	1.80	1.77	1.99	2.05	2.29	1.86	2.38
Rhode Island	1.76	2.05	2.00	—	1.93	—	—	—
South Carolina	1.55	1.59	1.56	1.90	1.96	2.50	2.73	1.43
South Dakota	—	1.64	1.37	1.43	2.13	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	1.96	1.89	1.79	1.85	1.93	1.92	1.86	1.85
Utah	1.80	1.52	1.43	3.65	6.27	2.69	2.70	2.63
Vermont	2.13	2.31	2.29	2.33	2.31	2.31	2.23	1.86
Virginia	2.58	2.36	2.24	3.12	7.84	2.41	2.60	2.57
Washington	5.97	3.54	4.37	4.37	3.87	5.83	29.07	6.51
West Virginia	2.57	3.30	1.86	3.68	3.89	4.08	4.09	3.52
Wisconsin	2.30	2.37	2.06	1.89	2.17	2.25	2.22	2.18
Wyoming	4.15	4.56	14.93	3.25	15.69	11.58	10.51	5.93
Total	2.09	1.95	1.84	1.90	2.06	2.06	1.97	1.92

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.
R = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Data for 1995 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 24. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1997

State	1997		1996					
	January		Total		December		November	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	77.7	14.6	64.9	13.5	76.7	14.6	68.7	14.4
Alaska	69.5	97.1	70.3	96.2	70.6	97.3	67.3	97.7
Arizona	87.4	19.9	83.7	20.6	84.0	22.6	84.1	20.7
Arkansas	96.1	15.4	94.2	16.4	95.7	16.8	94.0	15.2
California	51.1	11.7	53.9	10.7	55.7	9.4	57.5	10.4
Colorado	NA	NA	87.7	R21.0	95.2	20.5	93.9	23.3
Connecticut	90.1	76.0	87.1	84.0	88.1	81.8	84.2	76.9
Delaware	100.0	30.8	100.0	37.7	100.0	34.5	100.0	34.6
District of Columbia	67.6	—	71.8	—	66.1	—	56.0	—
Florida	96.1	8.2	79.1	9.0	96.3	9.2	97.1	8.0
Georgia	93.4	19.3	84.9	20.8	92.4	23.5	91.4	19.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	87.8	1.9	86.6	1.4	87.6	2.5	84.9	0.5
Illinois	62.0	13.7	53.2	11.4	55.8	19.0	52.7	11.5
Indiana	93.7	20.1	R85.6	R15.9	R93.8	R22.0	89.5	15.4
Iowa	90.3	9.6	85.6	9.0	86.8	11.7	86.1	18.3
Kansas	88.8	8.2	57.6	11.8	67.8	9.8	79.8	8.2
Kentucky	92.0	22.0	82.2	20.9	90.7	19.7	87.3	17.9
Louisiana	76.9	9.5	90.8	NA	96.4	11.1	96.4	NA
Maine	100.0	100.0	100.0	97.2	100.0	90.2	100.0	91.5
Maryland	NA	NA	89.4	11.1	84.1	19.1	88.7	5.4
Massachusetts	NA	NA	72.1	24.6	68.7	29.5	62.1	40.2
Michigan	69.2	14.7	60.6	5.9	68.6	12.2	65.5	9.1
Minnesota	98.6	37.1	91.8	36.4	97.3	42.5	97.2	41.2
Mississippi	96.9	38.4	R84.7	R34.0	R96.5	R38.1	91.3	38.9
Missouri	86.3	27.7	80.3	23.0	84.4	32.5	78.4	27.4
Montana	90.9	4.4	90.3	3.6	89.5	4.6	87.7	4.7
Nebraska	75.6	28.2	R68.5	24.7	76.3	27.9	R68.3	28.0
Nevada	77.2	8.3	77.1	1.6	98.0	8.0	71.5	7.6
New Hampshire	98.8	44.2	99.0	63.1	98.5	50.3	98.9	63.8
New Jersey	69.0	40.8	72.1	R52.5	68.4	39.2	66.8	39.1
New Mexico	74.1	19.4	56.4	2.8	69.8	15.1	66.4	5.5
New York	NA	NA	NA	9.8	NA	13.6	NA	10.6
North Carolina	100.0	90.1	92.0	49.4	99.0	90.4	91.9	43.0
North Dakota	93.4	43.3	86.3	28.3	88.6	40.6	88.7	46.9
Ohio	72.9	4.7	69.5	5.5	74.0	7.5	72.4	10.5
Oklahoma	90.7	7.4	83.5	7.0	89.8	7.4	85.2	7.9
Oregon	98.8	17.0	98.3	19.0	98.6	16.0	98.3	14.4
Pennsylvania	69.3	18.9	69.3	15.8	63.4	22.4	66.3	16.7
Rhode Island	89.6	38.1	91.6	16.4	89.4	45.8	87.6	55.7
South Carolina	100.0	86.8	81.4	64.7	100.0	86.5	96.8	82.2
South Dakota	86.9	31.4	82.7	33.6	82.8	33.3	80.7	34.1
Tennessee	94.0	35.9	77.4	28.2	92.4	32.2	91.6	30.9
Texas	NA	17.9	NA	18.6	72.7	17.6	61.7	17.2
Utah	NA	NA	81.9	9.2	84.4	10.0	81.2	9.6
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	87.5	15.5	73.0	13.1	85.9	14.9	83.0	14.4
Washington	87.8	26.7	85.9	23.8	87.4	26.5	84.6	21.6
West Virginia	67.0	14.4	45.2	13.4	69.2	13.9	52.0	14.4
Wisconsin	NA	NA	75.1	30.9	93.7	30.5	93.0	30.6
Wyoming	NA	NA	R52.4	R0.6	42.4	0.7	R58.8	R0.2
Total	70.9	17.9	70.4	17.6	71.0	R18.2	R68.7	16.6

See footnotes at end of table.

Table 24. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1997 — Continued

State	1996							
	October		September		August		July	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	66.4	12.6	68.5	12.8	67.8	12.4	69.2	13.3
Alaska	63.7	97.8	60.8	100.0	64.1	91.0	61.8	88.7
Arizona	83.2	19.1	83.5	19.1	78.4	20.5	82.1	19.6
Arkansas	90.2	14.5	88.9	21.3	91.5	16.3	88.5	18.3
California	43.7	9.1	44.9	9.6	44.3	8.8	48.0	11.5
Colorado	91.0	27.9	92.0	25.7	89.0	21.9	R89.8	R25.3
Connecticut	81.5	74.1	69.2	73.5	77.8	73.0	81.3	82.0
Delaware	100.0	30.7	100.0	27.5	100.0	26.1	100.0	26.2
District of Columbia	48.8	—	47.8	—	53.0	—	62.6	—
Florida	97.5	8.8	97.7	7.2	97.3	8.0	97.6	8.2
Georgia	89.6	21.3	85.4	26.7	87.0	21.2	87.6	13.5
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	77.3	1.6	80.0	1.3	82.0	1.7	82.4	1.1
Illinois	48.5	7.3	42.8	5.5	42.7	5.0	39.3	4.9
Indiana	87.9	12.9	70.7	8.1	74.3	9.1	79.1	8.6
Iowa	81.0	9.8	76.3	5.6	91.9	8.2	76.5	4.8
Kansas	69.3	11.4	77.5	10.2	33.6	10.3	66.2	10.0
Kentucky	87.5	17.4	81.8	15.4	82.9	15.2	83.2	21.4
Louisiana	98.6	NA	98.8	9.0	97.4	10.5	99.1	10.2
Maine	100.0	91.3	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	83.9	3.5	86.8	1.6	79.5	3.5	77.4	6.0
Massachusetts	69.5	34.8	55.0	30.2	61.1	34.8	68.0	36.8
Michigan	54.0	5.2	42.7	3.1	39.5	3.4	42.3	3.3
Minnesota	98.1	35.7	93.8	34.4	93.3	37.6	94.4	38.3
Mississippi	95.3	27.9	96.7	34.4	97.5	35.9	96.9	33.0
Missouri	69.0	16.8	67.0	17.8	57.7	13.0	61.7	19.4
Montana	87.1	2.9	85.6	2.2	86.9	1.5	87.4	1.8
Nebraska	R39.4	19.2	R64.4	22.0	R52.9	21.7	R50.8	21.7
Nevada	64.9	5.4	68.4	5.5	67.6	5.8	71.1	6.0
New Hampshire	98.6	63.2	98.2	63.8	98.2	61.6	98.0	64.7
New Jersey	65.8	36.9	60.3	36.1	60.3	38.8	61.3	R38.4
New Mexico	61.3	2.7	59.4	1.6	61.1	1.8	64.2	0.7
New York	NA	10.7	NA	11.1	NA	11.0	NA	11.1
North Carolina	85.4	24.3	85.9	21.4	88.3	30.6	95.9	61.4
North Dakota	77.2	33.3	72.4	21.7	73.1	9.2	72.2	8.5
Ohio	68.4	2.8	65.0	3.1	53.8	2.7	56.3	2.1
Oklahoma	78.2	5.2	78.3	5.2	74.5	5.9	76.4	5.3
Oregon	97.0	14.2	97.5	14.0	98.0	13.6	98.1	13.6
Pennsylvania	63.5	13.1	66.3	13.7	49.0	14.4	63.8	15.8
Rhode Island	67.0	57.2	50.5	51.4	87.1	50.4	84.4	42.2
South Carolina	95.6	79.3	96.6	80.6	96.6	80.7	100.0	87.2
South Dakota	72.9	15.8	68.6	12.3	66.9	13.5	67.1	15.1
Tennessee	83.5	33.8	75.9	23.6	83.6	30.4	91.1	39.5
Texas	NA	20.6	50.3	16.7	NA	17.2	65.0	24.7
Utah	79.5	9.7	78.4	8.6	71.9	7.7	73.3	7.4
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	72.5	7.0	62.4	7.7	72.2	6.6	65.8	7.2
Washington	82.7	19.3	81.5	19.9	80.1	11.7	80.0	21.1
West Virginia	41.0	13.0	32.5	11.6	41.9	12.5	41.5	12.8
Wisconsin	96.3	28.4	96.8	24.9	97.5	25.0	85.7	25.9
Wyoming	R44.2	R0.2	R96.1	R0.9	R95.1	R0.9	R98.8	R0.7
Total	R62.0	15.8	R59.2	14.6	R58.6	14.8	R61.3	R17.2

See footnotes at end of table.

Table 24. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1997 — Continued

State	1996							
	June		May		April		March	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	71.0	13.6	76.4	15.0	80.5	16.6	80.8	17.3
Alaska	65.2	93.7	68.9	98.5	71.9	98.5	76.3	97.7
Arizona	83.6	21.1	84.8	29.2	83.7	22.5	86.9	24.2
Arkansas	94.2	19.1	92.4	18.8	96.3	17.9	95.6	15.0
California	53.0	10.4	52.2	11.6	63.7	12.4	63.3	12.5
Colorado	93.6	20.4	93.6	18.5	94.2	17.9	94.8	16.8
Connecticut	79.2	90.3	78.6	92.4	89.9	94.5	93.1	96.6
Delaware	100.0	38.2	100.0	31.7	100.0	28.5	100.0	56.9
District of Columbia	71.2	—	71.1	—	87.8	—	84.6	—
Florida	97.7	9.1	97.8	10.8	97.7	11.6	96.9	11.5
Georgia	87.8	17.4	91.4	23.5	94.3	26.8	96.5	30.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	86.0	1.7	85.7	1.3	87.2	1.3	88.2	1.4
Illinois	43.8	4.4	49.3	7.9	53.4	12.4	59.3	16.5
Indiana	78.0	4.9	86.8	40.5	94.4	19.6	95.4	24.0
Iowa	87.6	5.4	90.4	6.8	89.4	7.3	88.2	8.2
Kansas	61.3	12.1	51.3	17.9	63.7	15.8	70.0	14.4
Kentucky	88.6	13.8	81.6	19.4	88.8	27.9	91.2	32.3
Louisiana	96.7	10.5	94.4	9.6	98.9	10.0	97.6	9.4
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	87.4	8.1	93.0	10.7	90.9	17.5	91.1	21.8
Massachusetts	70.6	39.4	77.4	38.2	80.0	43.3	82.2	37.3
Michigan	44.2	4.6	62.6	7.1	66.8	11.1	71.6	11.7
Minnesota	95.6	33.8	97.2	32.4	97.0	50.0	96.9	36.8
Mississippi	96.3	34.9	97.0	35.1	96.9	36.9	96.6	38.2
Missouri	72.0	23.4	78.5	24.6	84.4	25.8	85.4	23.9
Montana	90.5	1.8	90.5	2.8	92.4	4.0	91.6	5.0
Nebraska	[R]64.5	19.8	[R]71.5	23.4	[R]74.7	24.3	[R]82.0	25.9
Nevada	73.7	6.8	75.1	6.7	77.3	8.5	78.9	8.7
New Hampshire	98.5	66.2	98.9	66.9	99.1	68.1	99.2	63.6
New Jersey	64.4	30.7	67.6	39.9	72.2	34.8	77.3	41.8
New Mexico	64.1	1.7	45.8	0.3	56.4	0.9	57.9	0.4
New York	NA	12.4	NA	13.2	NA	14.5	NA	23.8
North Carolina	90.5	44.7	91.2	35.9	99.7	77.1	99.9	88.4
North Dakota	62.2	12.5	88.4	20.1	84.6	27.0	90.5	21.9
Ohio	42.0	2.8	63.1	4.3	72.2	5.9	76.0	7.2
Oklahoma	78.7	5.2	82.8	3.7	93.0	8.9	91.4	9.0
Oregon	98.3	16.3	98.1	18.1	98.1	23.7	98.6	25.5
Pennsylvania	63.6	14.4	68.2	15.9	72.2	18.5	76.5	25.5
Rhode Island	92.1	57.0	97.9	62.0	97.8	59.4	98.5	90.7
South Carolina	97.1	77.3	97.5	78.0	100.0	86.4	100.0	83.6
South Dakota	74.5	11.9	78.7	18.3	85.0	25.0	84.7	71.4
Tennessee	86.9	35.0	89.1	32.8	94.9	43.8	91.6	44.5
Texas	60.4	20.8	61.7	20.5	66.6	19.5	63.1	17.7
Utah	72.9	9.5	77.7	9.0	82.3	10.2	82.8	9.4
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	63.9	9.6	78.0	15.4	83.7	14.6	90.8	13.0
Washington	82.0	21.8	84.5	23.2	84.4	26.0	87.6	31.3
West Virginia	25.2	12.2	42.9	12.6	51.4	12.8	60.7	14.7
Wisconsin	92.9	26.2	93.3	31.0	93.7	35.6	95.6	46.1
Wyoming	[R]89.4	[R]0.8	[R]58.5	[R]0.8	[R]60.2	[R]0.7	[R]94.2	[R]0.7
Total	[R]62.7	15.6	[R]66.9	17.5	[R]72.2	[R]18.7	[R]74.4	[R]19.3

See footnotes at end of table.

Table 24. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1997 — Continued

State	1996				1995			
	February		January		Total		December	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	85.6	18.5	81.5	17.7	80.1	23.4	81.1	25.8
Alaska	79.1	98.4	73.7	96.3	79.9	52.1	77.9	60.6
Arizona	90.2	27.0	89.5	24.4	88.4	24.7	87.2	25.1
Arkansas	96.9	16.5	96.4	15.6	96.0	14.2	100.0	9.7
California	58.7	15.3	59.5	13.9	52.1	13.2	50.9	11.2
Colorado	96.2	17.6	95.3	24.9	94.2	8.5	93.8	9.0
Connecticut	93.2	98.2	93.4	95.1	82.0	90.1	91.7	96.1
Delaware	100.0	57.6	100.0	58.3	100.0	67.6	100.0	57.4
District of Columbia	83.8	—	80.5	—	76.8	—	77.4	—
Florida	97.1	11.7	98.8	17.4	97.6	16.2	96.7	17.7
Georgia	97.9	33.0	97.4	34.0	93.5	35.7	97.2	46.2
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	90.1	1.3	88.8	1.1	86.0	2.2	85.5	1.1
Illinois	59.3	16.3	58.0	15.2	50.4	11.0	53.3	14.5
Indiana	96.8	25.6	95.7	24.5	87.8	14.2	93.4	18.2
Iowa	91.6	8.1	90.2	10.9	89.3	8.2	91.2	9.9
Kansas	78.9	14.7	72.2	25.7	73.6	12.9	70.7	15.6
Kentucky	90.8	32.9	92.7	32.6	89.2	27.7	92.7	34.6
Louisiana	98.4	10.1	99.7	29.7	98.1	31.0	97.6	30.7
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	96.9	19.0	94.7	20.7	96.9	13.3	97.0	12.0
Massachusetts	83.2	49.6	83.9	44.0	84.9	53.4	79.5	48.1
Michigan	70.6	13.7	72.2	13.7	66.4	12.2	72.5	16.2
Minnesota	97.6	37.6	95.9	38.0	93.7	34.6	94.6	36.3
Mississippi	97.8	38.8	97.9	47.8	97.0	42.4	95.5	40.3
Missouri	89.7	32.9	87.4	26.1	83.3	22.4	85.7	24.3
Montana	93.5	5.6	92.0	4.5	91.6	3.1	91.9	4.6
Nebraska	[R]82.3	29.5	[R]83.7	31.2	77.1	16.5	NA	25.7
Nevada	81.1	10.0	79.7	10.0	76.5	7.7	75.2	8.1
New Hampshire	99.3	61.1	99.3	64.0	99.2	64.4	99.1	64.6
New Jersey	79.1	35.1	79.9	36.8	86.3	52.9	82.9	55.0
New Mexico	60.2	0.5	70.2	2.8	60.3	6.6	64.4	14.2
New York	NA	18.4	NA	18.3	76.2	17.4	79.9	22.2
North Carolina	99.8	66.9	99.9	93.4	92.4	46.9	99.9	94.2
North Dakota	92.9	25.0	90.4	31.7	80.9	18.2	86.5	26.4
Ohio	76.0	9.8	77.3	8.3	76.3	7.4	79.2	8.8
Oklahoma	93.2	11.1	91.5	8.7	85.2	15.2	86.0	9.5
Oregon	98.8	26.6	98.4	26.5	98.1	25.5	98.4	25.2
Pennsylvania	77.8	23.6	76.4	15.5	68.4	16.3	70.6	23.0
Rhode Island	99.3	84.1	100.0	39.4	100.0	11.1	100.0	4.9
South Carolina	100.0	81.4	100.0	81.9	96.4	81.4	100.0	90.0
South Dakota	87.9	32.6	89.9	31.0	86.9	27.6	88.5	31.4
Tennessee	96.8	38.2	96.7	39.8	93.8	47.6	97.2	56.2
Texas	75.9	23.7	71.4	21.5	68.6	25.5	67.9	22.7
Utah	85.6	10.0	84.0	9.4	81.8	11.0	82.8	8.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	96.5	13.8	96.9	14.8	84.1	14.8	91.4	17.0
Washington	89.8	31.2	89.1	33.0	91.8	32.9	89.7	29.2
West Virginia	62.3	16.6	60.3	19.2	51.6	14.4	60.8	16.3
Wisconsin	96.1	42.8	95.4	40.8	92.0	46.6	93.6	42.9
Wyoming	[R]94.1	0.6	[R]93.3	0.7	93.6	2.8	NA	NA
Total	[R]76.8	[R]20.6	[R]76.1	21.7	76.7	24.5	79.2	25.0

See footnotes at end of table.

Table 24. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1997 — Continued

State	1995							
	November		October		September		August	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	72.8	21.6	72.0	22.2	73.1	20.6	74.2	20.1
Alaska	72.9	64.3	69.2	57.8	72.1	31.0	71.3	26.6
Arizona	87.9	21.3	88.4	19.2	86.5	19.5	84.8	19.8
Arkansas	92.6	15.5	91.8	15.3	92.3	13.7	93.4	12.9
California	48.7	11.1	43.4	9.4	39.9	9.8	44.1	11.0
Colorado	93.5	11.3	89.8	11.2	89.3	8.9	89.7	7.0
Connecticut	87.7	99.5	81.6	94.7	72.1	93.0	63.7	85.2
Delaware	100.0	66.6	100.0	69.2	100.0	67.8	100.0	65.3
District of Columbia	74.6	—	64.8	—	61.6	—	66.2	—
Florida	97.4	18.0	97.8	15.2	98.1	14.3	97.8	13.6
Georgia	94.8	37.8	91.1	38.4	87.9	26.9	88.4	20.2
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	85.9	1.3	77.1	0.6	80.4	2.8	82.5	2.5
Illinois	51.8	13.3	46.6	8.4	39.6	6.3	38.2	4.6
Indiana	90.7	16.8	80.9	11.3	77.9	8.9	72.7	9.1
Iowa	89.6	12.0	86.9	10.0	80.7	6.2	77.7	5.7
Kansas	88.7	14.9	76.3	16.1	62.5	14.6	51.3	12.5
Kentucky	91.0	30.6	85.7	28.3	81.7	31.7	81.5	24.5
Louisiana	97.3	32.6	98.6	29.8	98.3	29.9	98.4	27.5
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	95.6	6.5	94.7	8.7	95.6	9.8	94.9	8.8
Massachusetts	81.6	53.7	81.0	54.4	77.5	46.1	77.3	51.4
Michigan	68.0	12.1	57.1	7.3	46.9	7.8	39.0	5.9
Minnesota	90.4	40.2	93.8	36.7	93.8	37.6	92.7	27.7
Mississippi	95.6	41.9	98.0	42.8	98.3	44.9	98.9	41.0
Missouri	78.7	20.1	71.8	17.2	71.4	19.7	71.6	17.8
Montana	91.8	3.4	88.8	2.5	88.2	2.1	88.9	1.4
Nebraska	NA	17.2	NA	19.5	NA	10.9	68.4	12.8
Nevada	70.8	7.5	67.8	6.2	71.3	6.5	70.0	6.7
New Hampshire	98.9	69.8	98.5	67.8	98.3	66.2	98.1	64.9
New Jersey	81.9	49.7	72.6	51.2	83.8	45.6	75.1	47.9
New Mexico	62.3	16.2	54.6	12.9	51.2	7.5	57.9	5.2
New York	77.2	20.4	72.3	15.8	68.1	14.5	64.1	13.0
North Carolina	93.6	51.4	88.2	41.4	87.5	31.0	87.1	28.6
North Dakota	80.3	21.8	64.2	12.8	70.9	11.6	58.9	10.9
Ohio	77.9	7.1	69.9	5.2	58.3	4.3	59.0	4.2
Oklahoma	79.8	7.6	74.6	7.0	76.7	12.6	74.1	7.4
Oregon	97.9	24.3	96.7	23.5	98.1	24.1	97.9	22.8
Pennsylvania	48.3	14.0	66.9	12.2	62.8	12.8	64.1	12.7
Rhode Island	100.0	13.7	100.0	17.9	100.0	12.7	100.0	12.0
South Carolina	95.9	78.5	95.3	79.8	95.3	82.5	95.1	81.0
South Dakota	85.8	35.0	82.3	21.4	75.8	20.0	75.5	14.4
Tennessee	96.5	61.0	89.1	47.6	87.7	39.3	87.2	39.2
Texas	70.7	24.9	55.8	23.1	71.2	24.1	69.1	27.3
Utah	80.2	10.4	79.4	11.1	75.2	10.9	71.3	11.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	84.4	19.1	71.5	11.0	70.9	13.9	73.5	13.0
Washington	88.7	28.1	87.9	26.4	87.4	24.8	90.7	29.5
West Virginia	51.6	16.0	42.0	14.2	38.9	13.0	38.1	13.4
Wisconsin	93.4	43.7	88.9	44.2	87.3	44.1	84.8	42.3
Wyoming	NA	NA	NA	NA	NA	NA	98.4	3.0
Total	75.6	24.7	69.7	22.5	67.9	22.0	66.6	21.8

See footnotes at end of table.

Table 24. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1997 — Continued

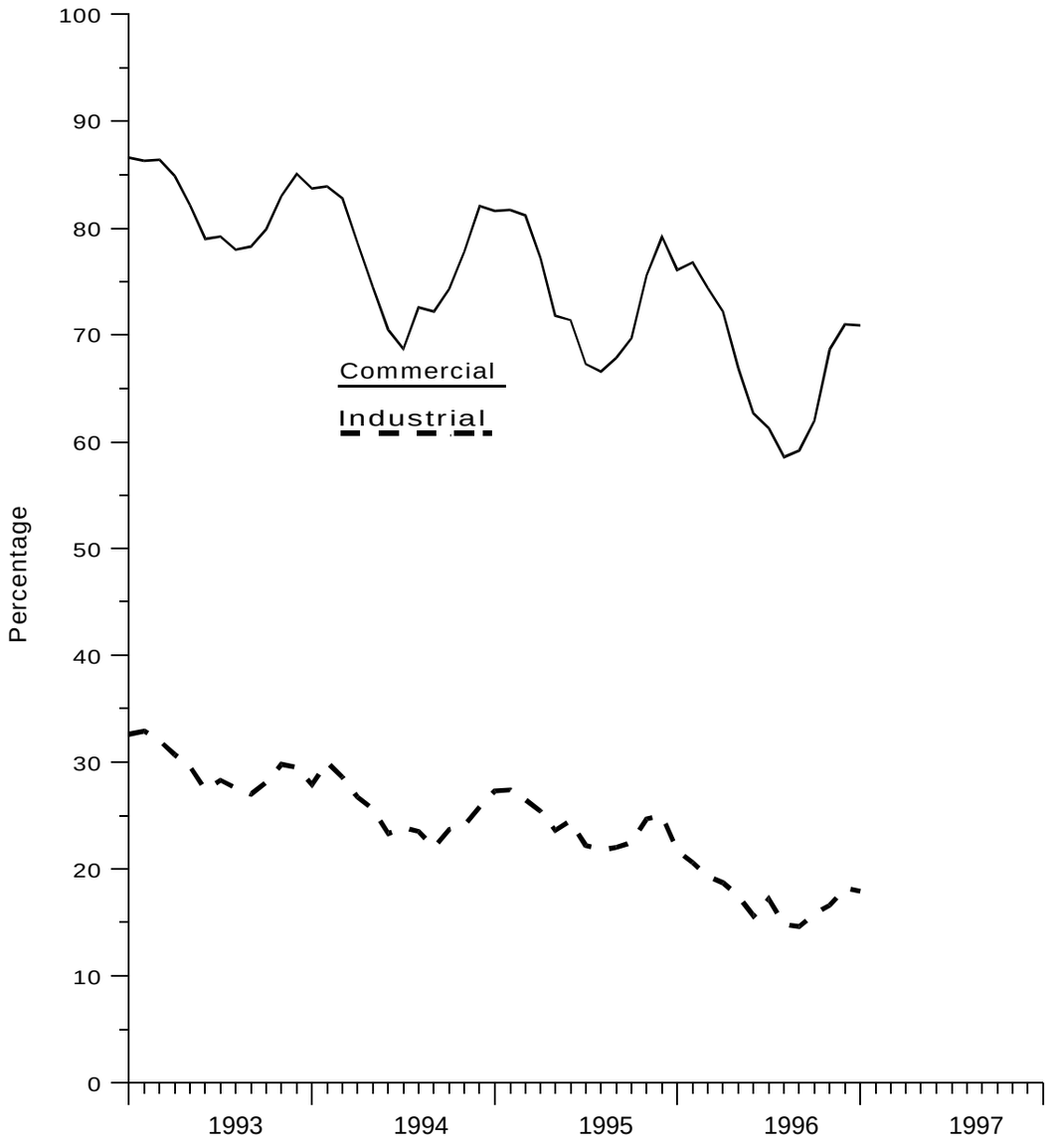
State	1995							
	July		June		May		April	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	75.1	19.6	75.7	21.5	77.5	21.9	81.4	24.0
Alaska	72.0	39.6	76.4	40.7	81.9	79.1	83.8	74.7
Arizona	84.5	24.9	87.9	32.5	87.8	24.7	86.9	30.4
Arkansas	91.5	12.5	93.1	13.6	93.3	13.7	95.1	15.1
California	44.7	12.2	53.1	14.4	50.3	14.4	56.8	14.5
Colorado	92.3	7.2	95.5	5.3	95.1	7.2	94.3	9.2
Connecticut	61.8	94.4	66.1	88.5	75.5	89.2	81.6	78.2
Delaware	100.0	62.6	100.0	68.1	100.0	79.1	100.0	75.7
District of Columbia	68.0	—	69.6	—	73.3	—	76.5	—
Florida	98.2	13.3	98.1	15.1	97.9	16.5	97.9	17.2
Georgia	87.4	29.7	88.4	32.7	89.7	32.2	90.7	29.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	83.7	3.0	85.3	3.2	86.0	2.5	85.5	3.1
Illinois	38.6	5.9	42.9	8.8	40.2	9.2	49.3	11.7
Indiana	73.5	7.5	76.1	8.2	83.4	9.4	87.0	12.9
Iowa	80.0	5.9	81.9	5.5	86.1	5.0	88.8	7.5
Kansas	66.0	13.1	64.8	15.2	62.9	11.1	69.5	12.3
Kentucky	76.5	22.3	80.6	27.1	87.4	25.5	86.3	26.3
Louisiana	98.1	27.7	98.0	32.3	98.2	31.0	98.6	30.5
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	94.4	10.5	96.2	11.2	95.9	14.7	96.7	7.7
Massachusetts	74.6	47.1	82.7	67.6	88.0	56.9	88.3	53.8
Michigan	41.6	5.9	45.8	6.2	61.5	8.1	68.0	13.9
Minnesota	91.4	30.9	93.0	38.4	95.5	38.7	96.2	39.5
Mississippi	98.4	38.0	90.4	39.2	98.8	44.5	98.5	41.8
Missouri	72.3	20.1	75.0	19.9	80.9	20.8	83.3	21.7
Montana	89.6	1.7	90.1	1.4	92.0	2.4	91.9	8.3
Nebraska	70.4	10.1	71.8	13.9	76.0	13.3	79.8	14.9
Nevada	72.8	7.3	76.5	7.0	77.1	7.0	78.9	8.4
New Hampshire	98.4	57.1	98.5	59.3	98.8	61.8	99.3	66.4
New Jersey	78.7	47.5	80.0	49.0	84.5	56.6	87.4	53.9
New Mexico	60.7	3.8	60.9	3.4	47.7	2.0	57.6	2.9
New York	66.5	13.4	66.5	14.0	71.7	15.9	76.3	16.9
North Carolina	88.0	30.4	86.4	43.5	90.6	44.3	76.0	47.6
North Dakota	61.7	7.1	70.7	13.4	80.0	14.2	83.2	18.5
Ohio	62.9	3.7	61.4	5.4	67.8	5.7	76.8	8.1
Oklahoma	77.0	17.5	79.3	15.8	84.9	18.8	85.3	23.9
Oregon	98.1	22.2	97.8	23.8	97.9	24.0	98.2	28.2
Pennsylvania	65.3	13.4	66.6	12.5	68.7	14.6	71.4	17.8
Rhode Island	100.0	9.0	100.0	14.2	100.0	12.2	100.0	11.9
South Carolina	95.0	85.4	88.4	83.5	95.6	83.0	95.0	79.6
South Dakota	76.5	15.0	77.1	17.3	82.8	21.8	87.2	31.5
Tennessee	89.9	41.4	93.0	48.8	89.6	58.0	90.8	36.7
Texas	68.1	25.1	72.7	26.1	55.0	22.7	70.2	28.0
Utah	73.9	10.6	79.3	10.8	80.0	9.1	83.1	9.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	72.0	10.4	74.7	13.2	76.2	11.6	77.6	14.8
Washington	90.8	33.2	91.3	33.8	91.8	33.4	92.6	37.9
West Virginia	36.6	14.8	34.8	14.0	42.2	14.0	50.6	13.8
Wisconsin	82.3	43.0	81.8	43.3	90.0	46.6	92.4	51.0
Wyoming	85.2	3.5	90.5	3.0	89.2	2.5	92.4	2.4
Total	67.3	22.2	71.4	24.5	71.8	23.6	77.2	25.4

R = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1993-1997



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Gas Home Customer-Weighted Heating Degree Days

Census Divisions	November 1 through November 30					December 1 through December 31				
	Normal[a]	1995	1996	Percent Change		Normal[a]	1995	1996	Percent Change	
				Normal to 1996	1995 to 1996				Normal to 1996	1995 to 1996
New England										
CT, ME, MA, NH, RI, VT	693	789	820	18.3	3.9	1,073	1,152	908	-15.4	-21.2
Middle Atlantic										
NJ, NY, PA	646	750	775	20.0	3.3	1,010	1,111	863	-14.6	-22.3
East North Central										
IL, IN, MI, OH, WI	730	913	917	25.6	0.4	1,142	1,208	1,068	-6.5	-11.6
West North Central										
IA, KS, MN, MO, ND, NE, SD	788	910	982	24.6	7.9	1,235	1,212	1,265	2.4	4.4
South Atlantic										
DE, FL, GA, MD and DC, NC, SC, VA, WV	421	550	538	27.8	-2.2	696	782	622	-10.6	-20.5
East South Central										
AL, KY, MS, TN	431	576	524	21.6	-9.0	717	766	618	-13.8	-19.3
West South Central										
AR, LA, OK, TX	280	301	309	10.4	2.7	534	510	453	-15.2	-11.2
Mountain										
AZ, CO, ID, MT, NV, NM, UT, WY	715	599	711	-0.6	18.7	1,006	901	923	-8.3	2.4
Pacific[b]										
CA, OR, WA	341	247	325	-4.7	31.6	519	440	452	-12.9	2.7
U.S. Average[b]	559	630	660	18.1	4.8	881	899	802	-9.0	-10.8

	January 1 through January 31					February 1 through February 28				
	Normal[a]	1996	1997	Percent Change		Normal[a]	1996	1997	Percent Change	
				Normal to 1997	1996 to 1997				Normal to 1997	1996 to 1997
New England										
CT, ME, MA, NH, RI, VT	1,222	1,195	1,183	-3.2	-1.0	1,053	1,045	872	-17.2	-16.6
Middle Atlantic										
NJ, NY, PA	1,168	1,164	1,129	-3.3	-3.0	999	965	821	-17.8	-14.9
East North Central										
IL, IN, MI, OH, WI	1,314	1,294	1,330	1.2	2.8	1,092	1,060	958	-12.3	-9.6
West North Central										
IA, KS, MN, MO, ND, NE, SD	1,384	1,446	1,420	2.6	-1.8	1,095	1,038	1,019	-6.9	-1.8
South Atlantic										
DE, FL, GA, MD and DC, NC, SC, VA, WV	809	810	740	-8.5	-8.6	652	642	509	-21.9	-20.7
East South Central										
AL, KY, MS, TN	843	828	795	-5.7	-4.0	656	644	521	-20.6	-19.1
West South Central										
AR, LA, OK, TX	631	600	620	-1.7	3.3	457	388	413	-9.6	6.4
Mountain										
AZ, CO, ID, MT, NV, NM, UT, WY	1,052	1,012	1,021	-2.9	0.9	820	765	834	1.7	9.0
Pacific[b]										
CA, OR, WA	526	471	484	-8.0	2.8	401	358	387	-3.5	8.1
U.S. Average[b]	995	978	976	-1.9	-0.2	806	768	709	-12.0	-7.7

See footnotes at end of table.

Table 25. Gas Home Customer-Weighted Heating Degree Days — Continued

Census Divisions	March 1 through March 31					Cumulative November 1 through March 31				
				Percent Change					Percent Change	
	Normal[a]	1996	1997	Normal to 1997	1996 to 1997	Normal[a]	1996	1997	Normal to 1997	1996 to 1997
New England										
CT, ME, MA, NH, RI, VT	892	967	912	2.2	-5.7	4,933	5,148	4,695	-4.8	-8.8
Middle Atlantic										
NJ, NY, PA	818	917	812	-0.7	-11.5	4,641	4,907	4,400	-5.2	-10.3
East North Central										
IL, IN, MI, OH, WI	867	1,025	824	-5.0	-19.6	5,145	5,500	5,097	-0.9	-7.3
West North Central										
IA, KS, MN, MO, ND, NE, SD	853	1,017	811	-4.9	-20.3	5,355	5,623	5,497	2.7	-2.2
South Atlantic										
DE, FL, GA, MD and DC, NC, SC, VA, WV	473	594	386	-18.4	-35.0	3,051	3,378	2,795	-8.4	-17.3
East South Central										
AL, KY, MS, TN	455	594	339	-25.5	-42.9	3,102	3,408	2,797	-9.8	-17.9
West South Central										
AR, LA, OK, TX	284	396	212	-25.4	-46.5	2,186	2,195	2,007	-8.2	-8.6
Mountain										
AZ, CO, ID, MT, NV, NM, UT, WY	730	728	616	-15.6	-15.4	4,323	4,005	4,105	-5.0	2.5
Pacific[b]										
CA, OR, WA	398	336	322	-19.1	-4.2	2,185	1,852	1,970	-9.8	6.4
U.S. Average[b]	647	736	590	-8.8	-19.8	3,888	4,011	3,737	-3.9	-6.8

[a] Normal is based on calculations of data from 1961 through 1990.
[b] Excludes Alaska and Hawaii.
Note: See Appendix A, Explanatory Note 11 for discussion of Heating Degree-Days computations.
Sources: National Oceanic and Atmospheric Administration.

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables l, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-627. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Three States report monthly data on nonhydrocarbon gases removed: Alabama, Texas, and Mississippi. Monthly data for California, Colorado, Florida, New Mexico, North Dakota, and Wyoming are estimated based on annual data reported on Form EIA-627. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes.

For States not supplying monthly data on the EIA-627, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-627 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual.* Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-627 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-627 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-627 for the previous year. State estimates for non-hydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-627. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for non-hydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-627 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Enery, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual.*

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, "Statistical Considerations," for a detailed explanation off sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual.*

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual.*

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1990 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Note 8. Average Wellhead Value

Annual Data

Form EIA-627 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Initial Monthly Data

An initial estimate is calculated based on the statistical relationship between U.S. monthly wellhead gas prices and the monthly composite spot wellhead prices published in the *Natural Gas Week.* The estimate is prepared using the same methodology that generates monthly gas price estimates for EIA's *Short-Term Energy Outlook.* The initial estimate is the latest monthly estimate presented.

Preliminary Monthly Data

A preliminary estimate of the U.S. gas price is made each month based on the change in the production-

weighted gas price from five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas. Gas prices for these five States are used because both their gas production and value represent a substantial sample of the U.S. gas production and value (roughly 50 percent), and their prices are readily available and provide a consistent series. The latest preliminary U.S. gas price estimate is calculated by multiplying the preliminary U.S. gas price estimate for the prior month by the ratio of the five States' gas price for the latest month to that of the prior month. This estimate replaces the initial gas price estimate.

Final Monthly Data

Preliminary monthly gas price data for Kansas, Mississippi, New Mexico, Oklahoma, and Texas are replaced by final monthly data that are adjusted to match the annual prices published in the *Natural Gas Annual* for each State. A revised set of the monthly U.S. gas price estimates are derived based on the monthly change in the production-weighted prices for these five States and adjusted to match the U.S. gas price published in the Natural Gas Annual.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual.* For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual.*

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply / disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmpospheric Administration. The information published in the *Natural Gas Monthly* is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations arond the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home cutomers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and four monthly surveys.

The annual reports are the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines, and the Form EIA-627, a voluntary survey completed by energy or conservation agencies in the gas-producing States.

The monthly reports include two surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and/or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1996 for report year 1995 totaled 1,991 questionnaire packages. To this original mailing, 11 names were added and 61 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,941 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents followup, 1,911 responses were entered into the data base, and there were 30 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual.*

Form EIA-627, "Annual Quantity and Value of Natural Gas Report"

Survey Design

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627. This form was designed by EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. The form was redesigned in 1990 to collect monthly breakdowns of all annual data elements. Data are not considered proprietary. It was also designed to avoid duplication of effort in collecting production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627.

Survey Universe and Response Statistics

Form EIA-627 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-627 survey by filing the completed form or by responding to telephone contacts. For 1995, data on the quantities of nonhydrocarbon gases removed were reported by the appropriate agencies of 22 of the 33 States. These 22 States accounted for 63 percent of total 1995 gross withdrawals. In addition, gross withdrawal data from Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of total production, excluded all or most of the nonhydrocarbon gases removed on leases.

Summary of Form EIA-627 Data Reporting Requirements

Form EIA-627 is a multipart annual form that collects data on the monthly and annual production volume of natural gas (including gross withdrawals from both gas and oil wells); volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on leases; marketed production; the value of marketed production; and the number of producing gas wells.

Respondents are asked to report all volumes in million cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-627 Edit Checks

Each filing of Form EIA-627 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported to the Interstate Oil and Gas Compact Commission (see Appendix B, "Data Sources"). Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-627

Data from Form EIA-627 are also published in the EIA publication, *Natural Gas Annual.*

Form EIA-895, "Monthly Quantity of Natural Gas Report"

Survey Design

Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." In 1994, the IOGCC decided to discontinue collection of their form. All gas producing States are requested to report on the Form EIA-895; a voluntary report. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Survey Universe and Response Statistics

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period. Therefore, States are requested to send the report within 80 days after the end of the report month.)

Summary of Data Requirements

The Form EIA-895 consists of seven questions on one page, and requires volumetric information on gross production (gas and oil wells individually), gas used for repressuring, gas vented and flared, non-hydrocarbon gases removed, natural gas used as fuel on leases, and marketed production.

Routine Edit Checks

State data are checked for reasonableness and, in the event of problems, the appropriate State agency is called.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 are a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/ FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 103 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different.

Prior to 1995, the Form FPC-14 was filed annually by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export was originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of 382 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current

month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors--residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,563 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1994 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1994. There were two strata--companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 390 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors--the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value ($C_{.j}$) were included in the certainty stratum. The formula for $C_{.j}$ was:

$$C_{.j} = \frac{X_{.j}}{2n} \qquad (1)$$

where:

$C_{.j}$ = cutoff value for consumer sector j,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j,

$X_{i.}$ = the sum within State of annual gas volumes for company i,

$X_{.j}$ = the sum within State of annual gas volumes in consumer sector j,

$X..$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors ($X_{i.}$). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n\frac{X2}{X..} \qquad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X2 = the sum within State of the $X_{i.}$ for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using ($I = \frac{X2}{m}$). A uniform random number R was selected between zero and I. The first sampled company was the first company on the list to have a cumulative measure of size greater than R. The second company selected was the first company on the list to have a cumulative measure of size greater than R + I. R + I was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X2 was the sum within State of the $X_{i.}$ for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling only industrial gas and all other companies.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled.

The following annual data are taken from the most recent 1990 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_{.j}}{Y'_{.j}} \qquad (3)$$

where:

$Y_{.j}$ = the sum within State of annual gas volumes in consumer sector j for all companies,

$Y'_{.j}$ = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_j = y_{.j} \times E_{vj} \qquad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector j,

$y_{.j}$ = the sum within State of reported monthly gas volumes in consumer sector j.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V'_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 28 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{y_{.jt}}{y_{.j}t-1} \qquad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

$y_{.jt}$ = gas volume reported by companies in the State stratum for report month t,

$y_{.j}t-1$ = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V^{*}_{jm} = V_{jm} + \left[(V_{ja} - V'_{jm}) \left(\frac{V_{jm}}{V'_{jm}} \right) \right] \qquad (6)$$

where:

V^{*}_{jm} = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate.

The formula for revising the estimated revenue is:

$$R^{*}_{jm} = R_{jm} + \left[(R_{ja} - R'_{jm}) \left(\frac{R_{jm}}{R'_{jm}} \right) \right] \qquad (7)$$

where:

R^{*}_{jm} = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues.

Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^{H} \left[N_h^2 \, \frac{(1 - \frac{n_h}{N_h})}{n_h (n_h - 1)} \left(\sum_{i=1} (y_i - T x_i)^2 \right) \right] \qquad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h
n_h = the sample size in stratum h

y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, January 1997

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	568	209	480	773	0.85	2.20	1.97
Alaska	0	0	0	0	—	—	—
Arizona	155	67	0	169	0.12	0.11	—
Arkansas	0	0	0	0	—	—	—
California	674	329	599	960	0.02	0.10	0.24
Colorado	NA	NA	NA	NA	NA	NA	NA
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	510	559	86	762	3.91	1.51	1.52
Georgia	92	192	385	440	0.23	0.14	0.63
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	715	1,923	5,653	6,014	0.65	0.49	1.39
Indiana	2,388	602	3,874	4,591	0.09	0.34	0.43
Iowa	98	182	122	240	0.08	0.05	0.28
Kansas	225	1,234	20,023	20,062	0.52	0.88	25.25
Kentucky	438	74	297	535	0.08	0.23	2.61
Louisiana	120	64	5,696	5,698	0.56	0.09	0.01
Maine	0	0	0	0	—	—	—
Maryland	NA	NA	NA	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA	NA	NA	NA
Michigan	2,429	3,703	10,109	11,036	0.15	0.21	0.29
Minnesota	715	861	1,092	1,564	0.36	0.77	0.32
Mississippi	343	141	2,364	2,393	0.63	0.61	0.21
Missouri	4,908	1,194	1,465	5,259	1.30	0.56	1.76
Montana	14	18	0	23	0.01	—	—
Nebraska	72	165	224	288	0.21	0.27	1.26
Nevada	0	0	0	0	—	—	—
New Hampshire	0	0	0	0	—	—	—
New Jersey	0	0	0	0	—	—	—
New Mexico	452	213	814	955	1.06	2.36	—
New York	NA	NA	NA	NA	NA	NA	NA
North Carolina	88	71	303	323	0.07	0.10	0.23
North Dakota	0	0	0	0	—	—	—
Ohio	0	0	0	0	—	—	—
Oklahoma	296	3,047	1,319	3,333	0.05	0.87	0.33
Oregon	0	0	0	0	—	—	—
Pennsylvania	312	1,414	4,621	4,843	0.05	0.11	5.53
Rhode Island	0	0	0	0	—	—	—
South Carolina	317	186	376	526	0.43	0.39	0.24
South Dakota	0	0	0	0	—	—	—
Tennessee	61	172	435	472	0.11	0.24	0.69
Texas	787	NA	2,133	NA	0.16	NA	0.10
Utah	NA	NA	NA	NA	NA	NA	NA
Vermont	0	0	0	0	—	—	—
Virginia	142	191	1,797	1,813	0.78	1.70	3.69
Washington	0	0	0	0	—	—	—
West Virginia	66	842	127	854	2.39	0.55	0.29
Wisconsin	NA	NA	NA	NA	NA	NA	NA
Wyoming	NA	NA	NA	NA	NA	NA	NA
Total	6,361	6,417	25,966	27,493	0.09	0.20	0.64

NA = Not Available.
— = Not Applicable.
Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1995*, DOE/EIA-0131(95), November 1996.
- *Natural Gas Annual 1993 Supplement: Company Profiles*,DOE/EIA-0131(93/S), February 1995.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Natural Gas 1995: Issues and Trends*, DOE/EIA-0560(95), November 1995.
- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report*, DOE/EIA-0216(95)/Advance Summary, October 1996.
- *Annual Energy Review 1995*, DOE/EIA-0384(95), July 1996. Published annually.
- *Annual Report to Congress 1995 DOE/EIA-01733(95), July 1996. Published annually.*
- *Annual Energy Outlook 1996*, DOE/EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

- *The Value of Underground Storage in Today's Natural Gas Industry*, DOE/EIA-0591, March 1995.
- *Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995*, DOE/EIA-0542(95), July 1994.
- *Largest U.S. Oil and Gas Fields*, DOE/EIA-TR-0567, August 1993.
- *Energy Policy Act Transportation Rate Study*, DOE/EIA-0571, October 1993.
- *Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates*, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(95), January 1996.
- *Oil and Gas Field Code Master List, 1995*, EIA-0370(95), December 1996.

NGM Feature Articles

March 1992

Revisions to Monthly Natural Gas Data
(Discusses the revision errors for natural gas data.)

August 1992

U.S. Natural Gas Imports and Exports - 1991

(Contains final 1991 data on all U.S. imports and exports of natural gas.)

November 1992

Natural Gas Futures Contract Market - The First 2 Years

(Reviews the financial and economic significance of trading in natural gas futures markets.)

December 1992

Three-Dimensional Seismology — A New Perspective

(Describes the impact 3D seismology will have on future U.S. reserves and production.)

Imports of Canadian Gas Under Long-Term Contracts

(Addresses how regulatory changes have altered the contractual revisions of long-term agreements.)

March 1993

Natural Gas 1992: Issues and Trends

(Provides an overview of the natural gas industry in 1991 and 1992, focusing on trends in production, consumption, and pricing of natural gas.)

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity and projects this capacity for 1992 and 1993.)

April 1993

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1993

U.S. Natural Gas Imports and Exports - 1992

(Contains final 1992 data on all U.S. imports and exports of natural gas.)

October 1993

U.S. Production of Natural Gas from Tight Reservoirs
(Discusses the economic incentives offered to induce operators to explore for and develop gas reservoirs from unconventional sources.)

The Expanding Role of Underground Storage

(Discusses the expanded role of underground natural gas storage in the restructured natural gas industry.)

January 1994

U.S. Coalbed Methane Production

(Updates the Energy Information Administration's coalbed methane production information through 1992 and presents it by geologic basin and by State.)

February 1994

Contracting for Natural Gas Supplies

(Addresses the contractual relationships of producers with end users and distributors for the natural gas that is shipped along the interstate pipeline systems.)

May 1994

Opportunities with Fuel Cells

(Discusses the uses of fuel cells in todays market.)

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

June 1994

Natural Gas 1994: Issues and Trends - Executive Summary

(Provides an overview of the natural gas industry in 1993 focusing on trends in production, consumption, and pricing of natural gas.)

August 1994

U.S. Natural Gas Imports and Exports - 1993

(Contains final 1993 data on all U.S. imports and exports of natural gas.)

March 1995

The Comparability of Resource and Reserve Data for Crude Oil, Natural Gas, Coal, and Uranium

(Clarifies which terms are equivalent among the four major energy minerals in the United States.)

July 1995

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

June 1996

Natural Gas Industry Restructuring and Data Collection

(Discusses how restructuring of the natural gas industry has impacted the natural gas data collection efforts.)

July 1996

Revisions to Monthly Natural Gas Data
(Discusses the revision errors for natural gas data.)

November 1996

U.S. Natural Gas Imports and Exports - 1995

(Contains final 1995 data on all U.S. imports and exports of natural gas.)

December 1996

Crosswell Seismology -- A View from Aside

(Discusses crosswell seismology and its geologic and economic implications for the domestic oil and gas industry.)

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics:				
Natural Gas Production	1, 2, 3	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Donna Guerrina (202) 586-6135
		Annual:	EIA-627, "Annual Quantity and Value of Natural Gas Report"	
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 426-1318
Extraction Loss	1	Monthly:	EIA computations	Margo Natof
		Annual:	Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	(202) 586-6303
Supplemental Gaseous Fuels	2	Monthly:	EIA computations	Donna Guerrina
		Annual:	Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	(202) 586-6135 Margo Natof (202) 586-6303
Imports and Exports	2	Monthly:	EIA computations	Norman Crabtree
		Annual:	Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	(202) 586-6180
Price:				
City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 426-1318
Wellhead	4	Monthly:	EIA computations	Donna Guerrina
		Annual:	Form EIA-627, "Annual Quantity and Value of Natural Gas Report"	(202) 586-6135
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202) 426-1318
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quaterly Natural Gas Import and and Export Sales and Price Report	Norman Crabtree (202) 586-6180
Producer Related Activities:				
Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Audrey Corley (202) 426-1159

Underground Storage:	9, 10, 11 12, 13	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Roy Kass (202) 426-1318
Distribution and Consumption:				
Deliveries to:				
Residential,	14	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Commercial,	15		Natural Gas Purchases and Deliveries	(202) 426-1318
Industrial,	16		to Consumers"	
Electric Utility,	17		Form FERC-423, "Cost and Quality	
All Consumers	18		of Fuels for Electric Power Plants"	
Average Price to:				
City Gate,	19	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Residential,	20		Natural Gas Purchases and Deliveries	(202) 426-1318
Commercial,	21		to Consumers"	
Industrial,	22		Form FERC-423, "Cost and Quality	
Electric Utility	23		of Fuels for Electric Power Plants"	
Onsystem Sales	24	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
			Natural Gas Purchases and Deliveries	(202) 426-1318
			to Consumers"	
Heating Degree Days	25	Seasonal:	National Oceanic and Atmospheric	James Keeling
			Administration	(202) 586-6107
Highlights				
				Mary Carlson
				(202) 586-4749

Appendix F

Natural Gas Electronic Products

In addition to printed publications, the Energy Information Administration distributes information concerning the natural gas industry in a variety of electronic formats through several media. Two main types of products are available electronically: *viewable documents* that may be read or printed; and *post-processable files* that may be directly used as input to a computer application without additional keying and checking of data.

Viewable documents represent complete or selected sections of publications including text, tables and graphs. They may be as specific as single tables or as general as an entire publication. Post-processable documents on the other hand are either macro-level representations of information in published tables or micro-level respondent information representing responses on a specific nonconfidential survey.

The media used to distribute these electronic publications include: (1) The Energy Information Administration's Internet site (http://www.eia.doe.gov or ftp://ftp.eia.doe.gov); (2) Dial-in access through the Energy Information Administration's EPUB electronic bulletin board or through the Economic Bulletin Board of the Department of Commerce and the COGIS system; (3) The Energy Information Administration's quarterly CD-ROM(Info-Disk); (4) The Energy Information Administration's Fax on Demand System; and (5) diskettes.

	Internet	Dial-In	InfoDisk	Fax	Diskette
ANNUAL PUBLICATIONS					
Natural Gas Annual, Volume 1, 1994 Provides information on supply, and disposition of natural gas in the United States.Information is provided nationally, regionally, and by State for 1994.	V P		V P		P
Natural Gas Annual, Volume 2, 1994 Contains historical information about supply and disposition of natural gas at the national, regional, and State level as well as prices at selected points in the flow of gas from wellhead to burnertip.	P		P		P
Natural Gas 1995: Issues and Trends Addresses current issues affecting the natural gas industry and markets, and analyzes trends in the most recent natural gas data.	V		V		
Natural Gas 1994: Issues and Trends Provides an overview of the natural gas industry in 1993 and early 1994, focusing on the overall ability to deliver gas under the new regulatory mandates of the Federal Energy Regulatory Commission's Order 636.	V		V		
Oil and Gas Products List 1994-1995 Brief descriptions of the various information products prepared by the Office of Oil and Gas.	V		V		
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report 1994 1994 national and State estimates of reserves, reserve changes, and production, plus industry highlights.	V		V		
MONTHLY PUBLICATIONS					
Natural Gas Monthly, from September 1995 forward. Entire Publication in viewable format	V		V		

V=Viewable P=Post-Processable

	Internet	Dial-In	InfoDisk	Fax	Diskette
OTHER PUBLICATIONS					
Natural Gas 1995: Preliminary Highlights This Special Focus, which was featured in the April 1996 issue of the *Natural Gas Monthly*, presents events that affected the natural gas industry during 1995.	V	P		V	
Energy Policy Act Transportation Study: Interim Report on Natural Gas Flow and Rates (EPACT) Analysis of natural gas transportation rates and distribution patterns for the period from 1988 through 1994.	V		V		
Oil Production Capacity Expansion Cost for the Persian Gulf Quantifies the cost of expanding oil production capacity for the Persian Gulf based on geologic plays and fields rather than country-level economics. Development costs and volumes are estimated for the next 15 years.	V		V		
Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations 1990-1993 Cost of equipment and operation of oil and gas wells in the lower 48 States.	V		V		
Drilling Sideways- A Review of Horizontal Well Technology and the Domestic Application April 1993 report presenting salient aspects of current and near-future horizontal drilling and completion technology.	V		V		
International Oil and Gas Exploration and Development Compilation of country-level data and assessment of regional trends relating to upstream aspects of global oil and gas supply.	V		V		
Natural Gas Productive Capacity for the Lower 48 States 1984-1996 Analysis of monthly natural gas wellhead productive capacity.	V		V		
Natural Gas Productive Capacity for the Lower 48 States 1980-1995 Analysis of monthly natural gas wellhead productive capacity.	V		V		
Oil and Gas Field Code Master List Comprehensive listing of U.S. oil and gas field names as of November 1995.	V		V		
Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgysztan) Reservoir level assessments of oil and gas ultimate recovery in the former Soviet Union area.	V		V		
The Value of Underground Storage in Today's Natural Gas Industry Explores the significant and changing role of storage in the industry.	V		V		
U.S. Oil and Gas Development in the Early 1990's Analyses of the growing prominence of smaller energy companies in U.S. oil and gas production	V		V		
ANNUAL DATA					
Natural Gas Supply and Disposition, by State 1994	V P	V P		V	

V=Viewable P=Post-Processable

	Internet	Dial-In	InfoDisk	Fax	Diskette
Natural Gas Summary, United States by Year 1990-1994	V P	V P		V	
1994 Natural Gas Annual Volume 1 data Self-extracting file containing data (in comma-delimited format) that appear in the tables in Volume I of the 1994 *Natural Gas Annual*.	P		P		P
1994 Natural Gas Annual Volume 2 data Self-extracting file containing historical information (in comma-delimited format) found in the tables in Volume II of the 1994 *Natural Gas Annual*. Annual historical data at the national level are presented for 1930-1994. Annual information by State and region is presented for 1967-1994.	P		P		P
1993 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" for 1993.	P				P
1994 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" for 1994.	P				P
Data archive of historical reserves estimates for U.S. Crude Oil, Natural Gas, and Natural Gas Liquids. National, State, and State subregion data published in the reserves balance tables of *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves* from 1977 forward.	P				P
MONTHLY DATA					
Natural Gas Production, United States by Month 1989-forward	P	P		V	
Natural Gas Supply and Disposition, 1989-forward	P	P		V	
Natural Gas Imports and Exports 1989-forward	P	P		V	
Natural Gas Underground Storage: United States Total by Month 1989-forward	P	P		V	
Natural Gas Prices: United States Total by Month 1989-forward	P	P		V	
Natural Gas Consumption by Sector: United States Total by Month, 1989-forward	P	P		V	
SELF-EXTRACTING COMPRESSED DATA FILE ARCHIVES					
Natural Gas Consumption and Prices, for most recent 2-3 years	P	P			
Natural Gas Consumption and Prices, for 1984-1992	P	P			
OTHER REPORTS					
Natural Gas Weekly Market Update Analysis of current price, supply and storage data along with a two week snapshot of the weather in four distinct metropolitan areas.	V			V	

V=Viewable P=Post-Processable

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the termperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oi1 in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.